THE DUBLIN JOURNAL

OF

MEDICAL SCIENCE:

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CONTAINING

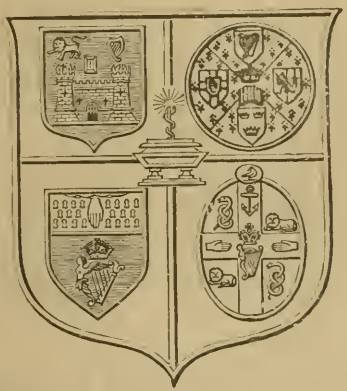
ORIGINAL COMMUNICATIONS,

REVIEWS, ABSTRACTS, AND REPORTS,

IN

Medicine, Surgery, and Collateral Sciences.

Edited by Sir JOHN MOORE, B.A., M.D., Univ. Dubl., F.R.C.P.I.



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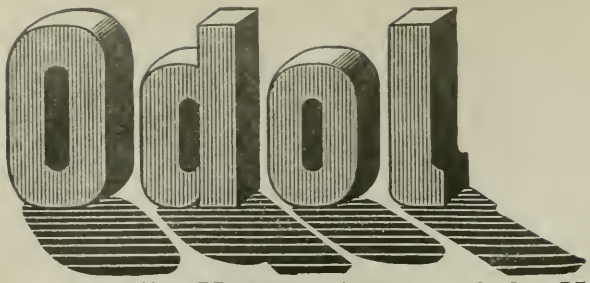

The Modern Hygiene of the Mouth.

It is well known that modern hygiene sets but little value on tooth-powders or tooth-pastes as teeth cleansers—these preparations being serviceable only in scouring the outward and visible surface of the teeth in a mechanical way, whereas the cavities and fissures, the very seat of decay in the teeth, are more often filled up than cleansed by the process, the cause in itself of the injurious effects that so frequently ensue from the use of the tooth-powders and pastes known to the trade. In the case of tooth-soaps and pastes especially, the presence of alkalies, to be detected even in the best soaps, is particularly prejudicial to the teeth.

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ADMIRALTY, S.W.,
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AT

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INDIA OFFICE,
October, 1903.

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FOR

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IN

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E. STEDMAN,
Major-General, Military Secretary.

1. A Text-Book of Operative Surgery. By Warren Stone Bickham, Phar. M., M.D. Philadelphia, New York, London: W. B. Saunders & Co. 1903. 8vo. Pp. 984.

2. A Text-Book of Obstetrics. By J. Clarence Webster, M.D. (Edin.), F.R.C.P.E., F.R.S.E. Philadelphia, New York, London: W. B. Saunders & Co. 1903. 8vo. Pp. 767.

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6. A Case of Progressively Developing Hemiplegia, later becoming Triplegia, resulting from Primary Degeneration of the Pyramidal Tracts. By Charles K. Mills, M.D., and William G. Spiller, M.D. Reprint. 1903. Pp. 13.

7. A Manual of Pathology. By Joseph Coats, M.D. Fifth Edition. Revised throughout by L. R. Sutherland, M.B., Professor of Pathology in the University of St. Andrew's. London, New York, and Bombay: Longmans, Green & Co. 1903. 8vo. Pp. xxvi + 1287.

8. Ueber das neue Balsamicum "Gonosan." Von Dr. G. A. Küsel in Moskau. Reprint. Vienna. 1903. Pp. 4.

9. Zur Behandlung der Gonorrhoe mit Gonosan. Von Dr. Ludwig Spitzer Reprint. Vienna. 1903. Pp. 3.

10. Zur Gonosanfrage. Von Dr. Boss in Strassburg im Elsass. Reprint. 1903. Pp. 5.

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12. First Aid. By R. J. Collie, M.D., and C. F. Wightman, F.R.C.S. London: George Gill & Sons. 1903. Pp. v + 125.

13. The Health Resort. Vol. II. No. 7. October, 1903. London: John Bale, Sons & Danielsson.

14. Reprints of Various Papers. By Charles P. Noble, M.D., Surgeon-in-Chief, Kensington Hospital for Women, Philadelphia.

15. Surgical Lectures and Essays. By A. Marmaduke Sheild, M.B. (Cantab.), F.R.C.S. London: The Medical Publishing Co. 1903. 8vo. Pp. 312.

16. A System of Physiologic Therapeutics. Edited by Solomon Solis Cohen, A.M., M.D. Vol. VIII.—Rest, Mental Therapeutics, Suggestion. By Francis X. Dercum, M.D., Ph.D. London: Rebman. 1903. 8vo. Pp. 332.

17. Transactions of the American Pediatric Society. Fourteenth Session. Edited by Walter Lester Carr, M.D. New York: E. B. Treat & Co. 1902. 8vo. Pp. xiii + 310.

18. Gynæcological Nursing. By Netta Stewart. Edinburgh: Oliver & Boyd. 1903. Cr. 8vo. Pp. 174.

19. Aids to Cystoscopic Practice. By Fred. C. Valentine, M.D., New York. Reprint. 1903. Pp. 10.

20. The Boy's Venereal Peril. By F. C. V., Chicago. 1903. Reprint. Pp. 35. [Duplicate Copies].

21. A Short Practice of Midwifery, By Henry Jellett, B.A., M.D., B.Ch., B.A.O. (Dublin University), F.R.C.P.I., L.M. Fourth Edition, revised. London: J. & A. Churchill. 1903. 8vo. Pp. 557.

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23. Ueber einen Fall von Verbrennung von enormer Ausdehnung mit Ausgang in Heilung. Von K. Jegormin. Reprint. 1903. Pp. 2.

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27. Practical Text-Book of Midwifery for Nurses. By Robert Jardine, M.D. Lond. Second Edition. Edinburgh: William F. Clay. 1903. Cr. 8vo. Pp. 284.

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CONTENTS.

THIRD SERIES. No. 383.—NOVEMBER 2. 1903.

PART I.—ORIGINAL COMMUNICATIONS.

PART II.—REVIEWS AND BIBLIOGRAPHICAL NOTICES.

Part III.—SPECIAL REPORTS.

PAGE

PART IV.—MEDICAL MISCELLANY.

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NOVEMBER 2, 1903.

PART I.

ORIGINAL COMMUNICATIONS.

ART. XII.—*Enteric Fever and some of its Complications.*[a] By LAWRENCE F. M'DOWELL, B.A., M.B., M.D., Univ. Dubl.; Assistant District Surgeon, Omts Lovell, Cape Colony.

HAVING recently had 300 cases of typhoid fever under my care in general practice (and not in hospital), with absolutely no nursing in the true sense of the word, I have taken this disease as the subject of my thesis, not so much to throw new light on the treatment, as rather to bring forward some of the more interesting complications and my method of meeting them, and also to point out my own experience of treating one of the most frequent and interesting diseases we South African general practitioners have to combat.

The form of typhoid resembles closely that met with at home, except that pyrexia is decidedly higher—105° being frequent and 104° quite common; I have frequently seen patients quite rational and not in the least delirious with a temperature of 105°.

I have found the treatment of this disease in this country by medical men, coming from almost every school, so vastly different, that I shall first briefly mention my method in a straight-forward case, and the modifications I adopt in com-

[a] Being a Thesis read for the Degree of Doctor of Medicine of the University of Dublin, June, 1903.

plications. The patient is confined to bed in a well-ventilated room, if this can be obtained, but as often windows are hermetically sealed, and the Dutchman dreads fresh air, this is seldom obtainable. I order the patient to be undressed. I find this a necessary point to mention, as I have frequently been called to desperate cases and found the patient fully dressed, minus his hat and boots. I insist on the patients lying mostly on their sides, as I have more than once noticed that continual lying on the back—especially in more advanced cases—leads to more rapid development of hypostatic congestion of the lungs. Special care is taken to avoid bedsores. I vastly prefer that the patient should use a bedpan rather than that he should get out of bed; for if the patient becomes early accustomed to its use, I have no hesitation in saying that when he is beginning to get exhausted, as the disease progresses, the use of a bedpan is far less trying than getting up in bed. Sponging to reduce pyrexia, which undoubtedly is the method *par excellence*, I find impossible in my practice, as our Dutch population will not carry it out properly, and so I have had to use antipyretics—namely, antikamnia, antipyrin, phenacetin, and antifebrin.

Antikamnia I have found by far the most useful, in gr. iv. to gr. v., for an adult every three or four hours, as required; it reduces the temperature from 2° to 3° with no heart depression, and if given with a small quantity of brandy is most satisfactory.

Antifebrin, on the other hand, I have found very depressing, and in one adult a dose of gr. iv. caused a drop of 7.5° with alarming collapse, and only with considerable stimulation did the patient rally.

If there is no diarrhœa I give milk unboiled, bovril, or some other meat extract, and yolk of egg beaten up with milk. These I order in small quantities every two hours, or in very severe cases every hour. I prescribe stimulants, and brandy by preference, but only when called for and when the tongue has a tendency to lose its moistness. I then give from ʒiv. to ʒxii. in 24 hours in ʒss doses, as the severity of the case demands. I always give it with milk or some other nourishment, and not with water.

Water I allow to the amount of half a pint to one pint in 24 hours, and have found a little citric acid of great

assistance in relieving thirst and sweetening the taste in the mouth.

I have tried most medicines recommended, and find them one and all of very little use as far as aborting the course of the disease goes. Symptomatic treatment is by far the most satisfactory to the patient. I now invariably in the earlier stages of the disease give a dilute hydrochloric acid mixture, and as the case progresses give an effervescing mixture of—

℞. Quin. sulph., - gr. 32,
Acid. citric., - gr. 160,
Aquæ, - ad ℥iv. M

And— ℞. Ammon. carb. - gr. 80,
Tr. senegæ, - ♏. 160,
Sodii bicarb., - gr. 160,
Tr. digitalis - ♏. 80,
Aquæ, - ad ℥viii. M.

℥ii. of the acid mixed with ℥ss of the alkali, and ℥ss of water in effervescence every three or four hours.

And, if a heart tonic is required, I give

℞. Tr. strophanthi, - ♏. 160,
Liq. strychninæ, - ♏. 80,
Aquæ, - ad ℥ii.
℥i. quâque horâ, cum aquæ semiunciâ.

I have found in far the greater number of cases of deaths that heart failure, with lung trouble, is the *bête noire* in this disease, and not diarrhœa or intestinal trouble, which, I think, with peptonised milk and great care in dieting can, to a great extent, be moderated.

If *cough* is troublesome I give some simple mixture, containing compound tincture of camphor, ipecacuanha wine, spirit of chloroform, and syrup of ginger.

For intense headache and pains through the body, which in this country are often very marked in the earlier stages, the following prescription I have always found give prompt relief :—

℞. Sodii salicylatis, - gr. 10,
Potassii nitratis, - gr. 10,
Tr. gelsemii, - ♏. 5,
Aquæ ad ℥ss q. h.

If *constipation* is complained of, hydrarg. subchlor. gr. 5, or ol. ricini in earlier stages, is ordered, but as the case progresses I use enemata solely.

Hæmorrhage from the bowels occurred in 2.6 per cent. of my cases, and in every one of these cases, with one exception, it was of an alarming nature. I have always prescribed—

℞. Tr. camph. co., - ♏. 30,
Acid. sulph. arom.. ♏. 10 vel 20,
Spt. chloroformi, - ♏. 10,
Syr. zingib. - ♏. 60,
Decoc. hæmatoxyli, ad ℥ss.

This dose should be repeated after every motion, diminishing the amount as soon as hæmorrhage seems to be controlled. In one case of torrential hæmorrhage I first ordered a good dose of liquor opii sedativus and backed it up with the foregoing prescription, and stopped all motions for seven days. All the patients recovered except one—a woman, 10 miles away, who was moribund when I first saw her. In all cases of hæmorrhage I stop all beef-tea, broths, meat essences, and merely give peptonised milk; I also diminish the quantity of stimulants unless absolutely necessary. I order the patient to be moved as little as possible.

Epistaxis of an alarming nature I have met twice in enteric fever, and in both instances I ordered tincture of the perchloride of iron, chlorate of potassium and strychnin in large doses, which stopped the hæmorrhage.

An anæmic girl of seventeen years, however, who was exhausted when I arrived, although bleeding did not occur, rapidly sank. Possibly in her case transfusion of normal saline solution might have led to recovery, but I had no apparatus. Should I, however, meet such a case again, I would have recourse to its use.

Another interesting, but very troublesome, complication I have occasionally had to deal with is *persistent vomiting.* In these cases when not severe I order peptonised milk in small quantities, or equal parts of milk and barley-water. I have found that beaten-up yolk of egg and beef-tea do not agree, while white of egg beaten up with milk is often retained. I order a mustard leaf to the epigastrium, and a bottle of

"Hudson's white mixture" in half-ounce doses every four hours. The formula is—

℞. Bismuth. subnit., - gr. 7½,
Potassii nitratis, - gr. 2,
Liq. morphin. hydrochlor., m. 7½,
Acid. hydrocyan. dil., - m. 2½,
Pulv. tragacanth. co., - gr. 8,
Aquæ, - ad ℥ss.

The first dose to be preceded by half a teaspoonful of dilute hydrochloric acid.

In the majority of cases this gives most encouraging results, but not always, and in this latter class, where nothing is retained, I rely entirely on nutritive enemata, and the mixture is tried at intervals to test irritability of the stomach. With this line of treatment even the very worst cases have been quickly relieved.

Diarrhœa is often troublesome, and I meet it by stopping nitrogenous nourishment, peptonising all milk, and by giving one of the following prescriptions according to the severity of the case :—

℞. Tr. camph. co., - m. 30,
Ac. sulph. arom., - m. 15,
Spt. chloroformi, - m. 10,
Aquæ. - ad ℥ss,

Or— ℞. Bismuth. carb., - gr. 10,
Sodii bicarb., - gr. 5,
Pulv. cret. arom., - gr. 20,
Tr. opii, - m. 5,
Spt. chloroformi, - m. 10,
Sodii salicylatis,
Pulv. trag. co., - āā gr. 10.
Aquæ, - ad ℥i.

A most important point to observe is the *character of the motions*, for a patient may be taking plenty of nourishment but every day be rapidly losing ground, and in all these cases it will be noticed that the motions are full of small particles of undigested milk. This is a clear sign that pepsin is required, and if milk be peptonised results are often little short of wonderful. I hold that the milk should be peptonised from the beginning, for enteric being essentially a disease of the

intestines their digestive powers must be greatly diminished, and any assistance we can give should not be withheld.

A far harder foe to meet than diarrhœa is *severe meteorism*, which is in some cases very troublesome, and I can only say I know of nothing that is of much use. Dieting and keeping the stomach regular, to a certain extent alleviate it, but in many cases these measures have no effect. I have been advised to use solution of the perchloride of mercury and compound tincture of bark, but have found the combination useless, as also turpentine fomentations and insertion of the long India-rubber tube. These measures may give a few minutes relief but nothing more. To me meteorism is a serious sign, and often precedes perforation or hæmorrhage.

Acute cystitis is a complication with which I have met in two children ; strangury was intense and free hæmaturia. I treated both these cases with large doses of sodium salicylate, which in a few hours gave the most satisfactory, and I may say unlooked for, results. Warm fomentations with tr. opii were applied at the same time over the bladder and sacrum.

Retention of urine has in five cases (three males and two females) been a troublesome complication, and has required catheterisation for from two to eight days. For this complication, too, I know of nothing that is of the slightest use to tone up the bladder.

I come now to what I consider by far the most serious complication of enteric—namely, *heart failure*. When one has anxiously watched and done one's utmost, one reluctantly sees that the patient is "going down hill." His pulse is soft and almost running, his breathing is rapid, and moist râles are heard at back and front of the chest ; his tongue is dry and cracked ; his whole appearance is apathetic ; his fingers pick at the bed-clothes, and he lies low in bed. I say, however, that in enteric there is always a hope that the most desperate cases may recover. I remember one adult, twenty-four years old, who relapsed. He became desperately ill. He had well-marked Cheyne-Stokes' respiration, and an almost imperceptible pulse, temperature 105°, and was so weak that I had absolutely no hope for him. He, however, rallied, and made a most satisfactory recovery when I had been

momentarily expecting the end. Now it often happens to us South African doctors that we are called miles into the country to such a case, and the patient appears at his lowest.

In these cases where there is no hæmorrhage or excessive diarrhœa I order peptonised milk, two ounces every hour (and sips of water in between, if thirsty). Milk I give with half an ounce of the best French brandy, and every third hour, in place of milk, I give the same quantity of bovril, and every eight hours the yolk of an egg beaten up with milk. Half a cup of black coffee, the yolk of an egg, and half an ounce of brandy once or twice daily are one of the best heart tonics and restoratives I know of.

In these cases where the heart shows signs of flagging and the lungs are getting water-logged, I have found nothing to compare with the effervescing quinine mixture before mentioned. The combination seems almost an ideal one, and Tr. strophanthi ♏. 10, liquor. strychninæ ♏. 5, every four hours, together with the amount of stimulants given, seem to brace the heart to new life, bring out its latent force, and tide the patient over the desperate straits he had reached. A mustard plaster to the heart and warmth to the extremities, and, if the case seems *in extremis*, hypodermic injections of 5 minims of solution of strychnin every two, three, or four hours, instead of the "heart mixture," until the heart responds to stimulation are invaluable remedies.

Champagne I have used in these cases, but cannot say that I have found it superior to good brandy. If hypostatic congestion of lungs is well marked, I have tried warmth with a stimulating liniment; but I feel that any good results have depended more on the renewed heart-vigour than to local effect of application.

ART. XIII.—*Malarial Fever as met with in South Africa during the late War: its Symptoms, Treatment, and Prevention.*[a] By ARTHUR HAMILTON STEWART ROBERTS, M.D., B.Ch. Univ. Dubl.

IT was my fortune during the late war to be stationed at Komati Poort, one of the most unhealthy districts in South Africa, where malarial fever forms the great obstacle to European settlements. Here the telluric conditions were eminently favourable for the development of the malarial poison. It is a badly-drained, low-lying district, rich in vegetable matter, through which runs the course of the old Crocodile river-bed. The so-called malarial season is divided into well-marked maximal and minimal periods, the latter corresponding to the months of May, June, July, and November, December, January, and the former to February, March, April, and August, September, October. The local inhabitants state that malarial fever is most prevalent after a very hot summer and during the rainy season.

The types of malarial fever which I observed at Komati Poort were all of the tertian or quartan variety, and, fortunately, no case of a pernicious type occurred. In these types, as a rule, chill, fever, and sweat followed each other in orderly sequence. The patient generally knew that he was going to have an attack a few hours before it arrived by a general feeling of malaise, often accompanied by headache.

The cold stage commences by headache, nausea, and vomiting. This is gradually followed by shivering, until at length the rigor becomes fully developed, the teeth chatter, and the whole body shakes. The patient looks cold, but while the surface temperature is reduced the temperature in the axilla may be greatly increased, and may rise to 104° or 105°. The pulse is rapid, hard, and small. This stage lasts from ten minutes to an hour or longer.

The hot stage commences with flushes of heat, and the skin becomes intensely hot. The face is flushed, the skin reddened, and the pulse full and bounding. There is sometimes delirium. The patient suffers from intense thirst. This stage lasts from half an hour to three or four hours.

[a] Being a Thesis read for the Degree of Doctor of Medicine of the University of Dublin, June, 1903.

The sweating stage varies much. The entire body may be bathed in perspiration, or it may be very slight. The headache and feeling of malaise disappear, and within a short time the paroxysm is over.

The total length of the paroxysm varies from ten to twelve hours, but is sometimes much shorter.

Many of my patients had repeated attacks of malarial fever, and this was followed, after several months, by the symptoms of chronic malarial poisoning. The malarial cachexia presented two striking features—namely, anæmia and enlarged spleen. The symptoms are those of ordinary anæmia, breathlessness on exertion, œdema of ankles, and hæmorrhages, particularly into the retina. They present the typical symptoms of splenic anæmia.

Treatment.—Each man was provided with a mosquito net, as infection seems most liable to occur at night, and ten grains of bisulphate of quinine were administered daily to each man as a prophylactic. During the paroxysm the patient was, in the cold stage, wrapped in blankets, given a purgative, followed by hot drinks, and the following prescription administered :—

R. Antipyrin. - - -	ʒij.
Spt. ammon. aromat. - -	ʒij.
Aquæ chloroformi ad. - -	ʒviij.
Ft. mist.	M.

Two tablespoonfuls to be given every four hours until the paroxysm is over.

This relieves the intense headache and backache, beads of perspiration appear upon the face, and gradually the whole body is bathed in a copious sweat, and the patient usually sinks into a refreshing sleep. At the expiration of the paroxysm the administration of twenty to thirty grains of bisulphate of quinine daily for the first three days, and then continued in smaller doses for the next two or three weeks, in many instances prevented fresh paroxysms.

In cases of chronic malaria, where the malarial cachexia was well established, I found that arsenic given in gradually increasing doses gave surprisingly good results, and that with careful treatment the majority of the cases recovered. The spleen was gradually reduced in size, but in many cases this enlargement would take years to completely disappear.

All the water for drinking purposes was boiled, and stored in mosquito proof tanks. The surrounding jungle was cleared away as much as possible, and the ground drained. The huts for the men were built at the highest possible level, and were elevated some distance above the ground, as the fact that the distribution of the poison of malaria is influenced by gravity has long been conceded. These endeavours to improve the sanitary conditions of Komati Poort were continued by my successors. The numerous shallow pools which exist on each side of the bed of the old Crocodile River, and which formed breeding grounds for the mosquito, were flooded with petroleum. The gradual clearance of the thick jungle was persevered with, and by these means it is hoped to render the most unhealthy district in South Africa fit for the inhabitation of Europeans.

Art. XIV.—*Examination of the Blood as an Aid to Diagnosis.*[a]

By O'Donel H. Dodwell Browne, M.D., B.A. Univ. Dubl.

In all branches of the medical profession we find men taking up one special subject and devoting their whole time and skill to it. By this means they gain a very accurate and full knowledge of that subject, and can prove themselves a great help to all needing their aid. There are many men whose sole occupation it is to examine blood; and by subjecting the blood to certain tests, both physical and chemical, they are able to make a definite diagnosis of many diseases to which the human body is heir. Of all the means at their disposal for this pursuit the microscope seems to be their best applicance; nor is a thorough examination deemed to be satisfactory until the blood in some way or other be subjected to this crucial test.

With the aid of the microscope not only can the examiner tell in what way the examined blood differs from what is considered normal, but he can tell how far below or above the normal it differs, and after several such examinations can fairly accurately determine how the patient progresses.

[a] Being a Thesis read for the Degree of Doctor of Medicine of the University of Dublin, June, 1903.

Take, for instance, the condition of a patient suffering from "anæmia." Sometimes the number of corpuscles is below the normal, whilst in another case the percentage of the hæmoglobin may be at fault. Supposing any difficulty should arise as to which of these is at fault, the microscope will materially aid in giving the examiner a true insight as to which is the cause of trouble. Thus in chlorosis the percentage of the corpuscles may be approximately up to the normal, but each corpuscle, individually, contains a less quantity of the essential hæmoglobin than it normally should have, and hence arises the evil. Again, by the aid of the microscope the red blood cells are seen to be on the whole smaller than usual. Some of them are very small, and to these the name of *microcytes* is given ; a few are large (*macrocytes*) ; whilst others, with an irregular outline, are occasionally found (*poikilocytes*).

Take, again, as another example—where the blood is examined in a case of "pernicious anæmia," no less than two important points are solved by the use of the microscope, these two points being peculiar to pernicious anæmia and absent in chlorosis. The *first* and most marked feature in pernicious anæmia is the diminution of the red cells. Thus, although the total amount of hæmoglobin is invariably diminished, yet the amount contained in each corpuscle may be even in excess of the normal. The *second* difference is the change in size and shape of the cells. Sometimes there are found enormous nucleated red blood corpuscles, to which the name of *megaloblasts* is given. The poikilocytes are far more numerous than in chlorosis, and they have a characteristic appearance. They are pear-shaped, granular, and are, in addition, highly pigmented. The tendency also which the normal red cells have of forming into rouleaux is greatly diminished, and the blood does not coagulate so quickly when placed on the cover-glass. Nucleated red blood cells are also found in this condition. Firstly, there is the ordinary form, which is of the same size as the common corpuscle, having a small, deeply staining nucleus (normoblast) ; and secondly, there are very large corpuscles with a palely staining nucleus ; this latter corpuscle is called a *gigantoblast*, and somewhat resembles the megalocyte. Though these are always found

in the grave pernicious anæmia, they must not be held up as a definite diagnosis of this disease, as they are sometimes found associated with grave secondary anæmia (*bothriocephal-anæmia*), and also in *leucæmia*. Cell division in its different stages may be made out in these bodies sometimes. Another point may aid in differential diagnosis (should it be necessary) between pernicious anæmia and Hodgkins' disease, as in the latter there is no poikilocytosis.

Passing now from the red cells to a study of the white cells we find that in certain diseases the latter are at fault. Sometimes there is a slight increase, which cannot be called pathological leucocytosis. Here again by the aid of the microscope this different condition to leucocythæmia can be differentially made out, seeing that the increase of white cells in the former is limited to the multinucleated leucocytes.

The different forms of leucocythæmia are differentially recognised by a blood examination. In the form known as *spleno-medullary* the excess of white cells is made up of the following :—

Firstly.—The *myelocyte,* which is a large uninucleated neutrophile cell. The myelocytes appear to come from the bone marrow. They are considerably larger than the kind known as the large mononuclear leucocyte, and in some points are like them ; but they differ in the fact that their protoplasm is filled with a granular substance which has the power of staining with acid and alkaline dyes.

Secondly.—The *multi-nucleated leucocyte.*

Thirdly.—The *large uninucleated eosinophile* cells.

Fourthly.—*Leucocytes with coarse granules, whose peculiar power is to stain with the dye methylene-blue.*

In the *lymphatic* form the chief increase of the white cells is due almost entirely to cells called *lymphocytes.* Eosinophile corpuscles are rarely found, and myelocytes are not found.

The different diseases in which there is the condition known as *leucocytosis* are many and varied. By the microscope's aid one can often tell fairly clearly if certain pathological conditions exist when the ordinary examination cannot definitely settle the point.

It is well marked in *pneumonia, diphtheria,* and in *inflammations attended by the formation of pus.* It is also

frequently present in *pertussis, scarlet fever, erysipelas, acute rheumatism,* and in the different forms of *meningitis* and of *purulent inflammations.* It is an important point in *appendicitis, peritonitis, empyema, pyæmia, septicæmia,* and all *acute abscesses.* In these conditions the increase is seen to be almost wholly due to the multinuclear neutrophile corpuscle.

Leucocytosis is absent in *typhoid, influenza,* and in *tubercular inflammations.* In *meningitis* leucocytosis is generally present in both the septic and cerebro-spinal forms of this complaint, whereas in the *tubercular variety* it is markedly absent.

By some, leucocytosis is held to be constant in *pertussis.* It is usually highest in the early part of the convulsive stage. The value of this symptom for diagnosis is increased by the fact that leucocytosis is not present in those conditions with which pertussis is most likely to be confounded. Thus in appendicitis a very marked leucocytosis serves to distinguish *purulent* from *catarrhal appendicitis,* and also, at the same time, leads one to a diagnosis of abscess formation.

In *pneumonia* the increase commences shortly after the onset and continues during the stage of exudation, and declines rapidly after the crisis. A well-marked leucocytosis is of use in differentiating *pneumonia* from *typhoid, tuberculosis, influenza* and *bronchitis.*

In a case with increased leucocytosis in an active pneumonia, in the absence of any physical signs, the leucocytosis points generally to all empyema.

The prognostic value of leucocytosis depends on the individual's resisting powers, and the higher the leucocyte count, the better, as a rule, the prognosis will be.

DEATH OF JAMES ROBERT WALLACE, M.D., F.R.C.S.I.

We learn with much regret of the death, at Calcutta, on the night of Sunday, September 27, of this esteemed member of the Profession, who was Editor of the *Indian Medical Record.* He had a severe attack of pleurisy last spring, and subsequently came home for change of air and rest. He never recovered his health, and at last returned to India, where he arrived on September 4, in a very weak condition, from which he did not rally.

PART II.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

Hypnotism: Its History, Practice and Theory. By J. Milne Bramwell, M.B., C.M. London: Grant Richards. 1903. Pp. 478.

The author of this work has, we are told, devoted the last twelve years to hypnotic practice and research, and, convinced of the great therapeutic value of hypnotism, desires to draw the attention of medical men to the subject. As he thinks that this is still insufficiently dealt with in English medical literature, he aims in the present volume at giving not only the results of his own work, but also such a general account of the subject as can be brought within reasonable compass. The book is divided into fifteen chapters and two appendices. Although we are far from looking on hypnotism as such a valuable curative agent as it is represented to be by Dr. Bramwell, yet we can cordially recommend his book to all those who take an interest in psychological subjects. It is pleasantly and clearly written, contains the results of much research, and the writer evidently endeavours to avoid exaggeration of every kind and to put his case forward as fairly as he can.

In his historical sketch he dwells at some length on the works of Elliotson, Esdaile and Braid, because this has, to a large extent, been forgotten or passed over by other writers, while Mesmer and his school have received full justice in other works, and are consequently allotted shorter space.

In the chapter on the methods of inducing and terminating hypnotism all that anyone who wishes to embark on this kind of practice can need will be found. While the methods are classified into physical, psychical, and those of the magnetisers, it is pointed out that modern hypnotisers adopt a combination of methods which makes classification almost impossible. It is considered doubtful whether physical methods have ever succeeded where mental influences have

been excluded. "On the other hand, any physical method will succeed with a susceptible subject who knows what is expected of him."

As regards this susceptibility, the author finds as a general rule that "the nervous, ill-balanced and hysterical are the most difficult to influence; and that healthy people who possess the power of concentrating their attention are the easiest." The inhabitants of Goole, where Dr. Bramwell practises, seem to be particularly susceptible.

A long chapter is devoted to the experimental phenomena of hypnosis. The author has never been able to produce blisters by suggestion, nor has he ever been able to succeed in changing the temperature of the skin in hypnosis, and believes that in the cases in which these phenomena are stated to have occurred, fraud or mal-observation has not been eliminated; and yet these phenomena are gravely reported on what is considered for hypnotic matters good authority. Scarcely less remarkable are many of the observations of the author—for instance, a girl who had no particular aptitude for appreciating the passage of time. "Exp. 1.—Nov. 5, 1895; time, 4 p.m.; suggestion giving (*sic*) during hypnosis; at the expiration of 5h. and 20m. Miss D. was to make a cross on a piece of paper, and write down the time she believed it to be without looking at clock or watch. Result: The suggestion was carried out the minute it fell due." Fifty-five similar experiments of this kind are recorded, forty-five of which were perfectly, and eight partially, successful—the suggestions being carried out sometimes in the waking state, sometimes in hypnosis, and sometimes in natural sleep. It is reassuring to find the author expressing his disbelief in telepathy, clairvoyance, and the so-called occult phenomena.

In dealing with the management of hypnotic experiments several very judicious rules are laid down. If they were thoroughly observed in all cases we cannot but believe that the phenomena of hypnotism would contract themselves within narrower limits than they now occupy.

It is believed that the phenomena described as hypnotism in animals are different from those seen in human beings, and are cataleptic rather than hypnotic.

In the chapters on the employment of hypnotism in surgery and medicine we have a long array of cases in which operations of the most painful description were performed, without suffering, on patients in the hypnotic state, and all kinds of medical diseases benefited or cured by hypnotism. Most of these diseases were of a nervous character, but they vary a great deal from lying and biting the nails to eczema.

The most interesting and the longest chapter is that on hypnotic theories. The more important of these are stated clearly, and criticised with much ability. They are all admitted to be more or less unsatisfactory, but most favour seems to be shown for the secondary or subliminal consciousness theory. This is the theory of double consciousness which rests on the principle "that in certain persons, at least, the total possible consciousness may be split into parts which co-exist, but mutually ignore each other." Numerous astounding examples are given of these conditions of double consciousness, which are scarcely less strange than the strange case of Dr. Jekyll and Mr. Hyde—where a person in state A remembers all that occurred when he was in this state, but is quite oblivious of what occurred when he was in state B, while when in state B the contrary is the case. In some persons there are several such conditions. Thus we have Miss X. in three conditions :—

"1. Miss X. of ordinary waking life, who is reserved, morbidly conscious, self-contained, serious, deferential and dignified.

"2. Miss X. of the primary hypnotic condition, who is sad, serious, and apparently weak and suffering.

"3. Miss X. of the secondary or deeper hypnotic state, who is flippant and jovial, free from all physical infirmities, full of fun and reckless.

"1 can remember the events of waking life alone and knows nothing of 2 and 3.

"2 remembers all that has passed in previous primary hypnotic states, and also all that 1 can recall, and in addition some other events of waking life which 1 has forgotten.

"3 remembers all the events of the secondary or deeper hypnotic stages, as well as everything 1 and 2 can recall. In addition she can describe incidents in the past life of 1 that are lost to the memory of the latter, and can thus explain

much that the waking personality is at a loss to account for. She knows all about many of the little absent-minded doings of 1; and does not hesitate to voluntarily tell of them, although 1 is morbidly and unnecessarily reserved about her whole life."

But this is nothing to another young woman who existed in fifteen different conditions.

Dr. Bramwell is very strong in his opinion that hypnotism, when carefully carried out by competent operators, is absolutely devoid of danger to the subject. He further urges that as suggestions can be as easily resisted in the hypnotic as in the waking state, there is no danger of crimes being committed by persons in the former condition under the influence of suggestion.

We can only repeat, in conclusion, that while there is much in this book concerning which we have grave doubts, the work is one of great merit and full of interest. It gives a considerable list of references to the works of other writers on hypnotism, and has an exceedingly good index. The volume is well printed and brought out.

Gynæcology: A Text-book for Students and a Guide for Practitioners. By William Prior, M.D.; Professor of Gynæcology in the New York Polyclinic Medical School; Attending Gynæcologist New York Polyclinic Hospital; &c., &c. New York and London: Appleton & Co. 1903. Pp. xvi and 380. With 163 Illustrations in the Text.

Dr. Prior's writings are always interesting, and the present work is no exception. It is eminently the work of a practical man, with plenty of experience, and—that excellent possession—full confidence in himself. Further, its language is lucid and crisp, and though it is at times marred by solecisms of grammar or the latest American addition to the English language, it is still always intelligible and interesting. Dr. Prior has aimed at producing a work which will be of use to students and general practitioners, and which will confine itself strictly to gynæcological subjects, and we consider that he has succeeded in the task he has set himself. The book is essentially modern in every respect, and no regard or reverence for old procedures or teachings because of their age

has been sufficient to lead him to include them. In this rigid rejection we entirely sympathise with him. In a large text-book or work of reference, former procedures and teachings are worthy of a place, in so far as they enable the student to follow the evolution of modern methods; but in a handbook of the class of the work before us there is necessarily no room for such. It is true that Dr. Prior terms his work a "text-book," but this is just one of those American innovations to which we have already referred. A book of some 350 pages of large type, plentifully illustrated, can scarcely be termed as a "text-book" consistently with the correct use of that term.

Amongst the subjects which are especially well treated may be mentioned displacements of the uterus, the performance of abdominal cœliotomy, and the post-operative management of patients. We are not surprised to learn that Dr. Prior does not regard vaginal hysterectomy as a very valuable operation in cancer of the cervix, but we are not altogether prepared to assent to his view that if a sweeping abdominal operation cannot be performed, a better ultimate result with less immediate risk will be obtained by high amputation of the cervix than by vaginal hysterectomy.

Dr. Prior's work will afford much food for thought and information not alone to the general practitioner, but to the specialist, and we are confident that it will meet with the success it deserves.

Serum Therapy, Bacterial Therapeutics, and Vaccines. By R. T. Hewlett, M.D., M.R.C.P., D.P.H.; Professor of Pathology and Bacteriology, King's College, London, &c. London: Churchill. 1903. Pp. viii + 262.

The best way to give an idea of the scope of this little book is to follow the author's arrangement of the subject-matter, and the best way to review it is to point out *en passant* what appear to be special merits or defects in his presentment. The first 36 pages are given up to general considerations on immunity, Ehrlich's side-chain theory, anti-toxin formation, anti-microbic serums, and hæmatolysis. They constitute, in our opinion, the weakest feature of the book. Lucidity is not

the author's *forte*, and the somewhat complicated character of the subject overtaxes his stock of that quality. As early as page 4 this fact becomes apparent. Take his explanation of immunity. "Immunity is, briefly, insusceptibility to disease, generally to an infective disease. An infective disease is one which is caused by a living *materies morbi* or micro-organism, and is capable of being transmitted from one individual to another; it is an infection in contradistinction to an intoxication in which the agent that causes the disease is a chemical substance which is the product of the activity of a living organism or cell." Where, we may ask, would diphtheria come in under this arrangement? It possesses the two qualifications of an "infective disease"—viz., causation by a micro-organism and transmissibility: and it likewise possesses the qualification of an "intoxication"—viz., "the agent which produces the disease is a chemical substance which is the product of the activity of a living organism." The qualifications or characters assigned by Dr. Hewlett to infective and toxic diseases do not mutually exclude each other, and, therefore, the words "in contradistinction," which he uses, do not apply. The result is obscurity. On the next page we find it stated that "the black man is comparatively insusceptible to malaria and yellow fever, the result probably of the action of natural selection." Is not this insusceptibility rather the result of attacks in infancy?

On page 17 we find an exposition of the "toxic action of toxin upon bioplasm," in the course of which, in addition to a haptophore group or receptor on the cell, anchoring on the homonymous group of the toxin molecule, we find a so-called "toxophile group" described and depicted as sprouting from the cell. With this "toxophile" group the toxophore group of the toxin is supposed by the author to unite, thus forming a *double* connection between toxin and cell. This double connection is depicted in Fig. 3, and we consider it to be a needless complication, and, what is worse, a total misconception of Ehrlich's view, according to which the receptors intended to anchor on nutrition-granules or groups may come to be occupied by accidentally adaptable toxin molecules, but which entirely denies the presence of any special "toxophile" groups, the existence of which being

antagonistic to the survival of the cell, would be inapplicable on the hypothesis of natural selection.

Dr. Hewlett is much more "at home" when dealing with the practical work of preparing, standardising, and administering the several anti-serums. His account of the anti-toxins of tetanus, diphtheria and snake-poison is in every way excellent, and so is his description of the chief anti-microbic serums—those that antagonise the streptococcus, pneumococcus, bacillus of plague and of typhoid. Then follows an account of transfusion of animal blood and saline solution.

Chapter VII. deals at some length with the several kinds of tuberculin, and also with mallein. The therapeutic and diagnostic properties of these bacterial extracts are fully gone into, and the dosage explicitly described.

Chapter VIII., on the methods of producing active immunity, leaves a great deal to be desired, and shows obvious signs of haste and hurry. The account of the methods is confined to a mere mention of some of them. No account of the estimation of the anti-bacterial properties of the blood or serum by the determination of its agglutinin-content is given, and a very large portion of the chapter is taken up with matter textually quoted from Dr. Blaxall's report to the Local Government Board on the preparation, glycerination and storage of calf-lymph. There is a certain lack of discrimination in the solution of material for presentation, and a decided lack of appreciation of the directions, in which scientific research is pointing towards rational therapeusis. For example, in relation to the treatment of malignant disease Dr. Hewlett wastes his time and space describing Coley's defunct "fluid," and Adamkiewicz's exploded "cancroin," but does not allude to the high probability that the discovery of cytolytic serum may prove of therapeutic value. Similarly he lavishes his last page on brewer's yeast as "a well-known (?) therapeutic agent and a popular remedy for boils," whilst he leaves his reader in ignorance of the fact that the hæmatolytic properties of the pyococci may be rationally antagonised by a suitable anti-hæmatolysin.

These are great defects—defects one would not expect to find in a work originating from such a source; defects which we can attribute only to undue haste and want of reflection

on the part of a bacteriologist of Professor Hewlett's standing, who can hardly be suspected of ignorance. They are, however, defects which rob the book of much of the merit it might have possessed, and which prevent us from recommending it as an up-to-date and thorough-going exposition of its subject-matter.

Verhandlungen des Vereins für innere Medicin in Berlin. Herausgegeben von dem Vorstande des Vereins. Jahrgang XXII., 1902–1903. Berlin. 1903. Ss. 488.

The work of the Berlin Medical Society during the session 1902–3, as recorded in this volume of the Transactions, shows no falling off either in quantity or quality as compared with that of previous years. In the volume before us are a large number of papers of great importance, and the long and valuable discussions to which most of them gave rise show the interest which they excited among the members attending the meetings. We may mention a few of the subjects treated of by the different contributors to the work of the Society.

Liepmann describes a new method of staining to demonstrate fat necrosis, and states that by its means this condition can be detected in many cases when it is not apparent to the naked eye.

Strauss reports most interesting observations on the osmotic pressure and chemical composition of the human chyle collected from the thoracic duct of a patient in whom the duct was cut during the operation for the removal of a tumour. He finds that food, water drinking, and ingestion of salt have remarkably little effect on the osmotic pressure of the chyle and of the blood. Only about 10 per cent. of the fat of the chyle is other than neutral fat; hence an enormous synthesis must occur in the intestinal epithelium. It was found that the human blood had a very great lipolytic power, for when chyle and difibrinated blood were mixed, and a current of air passed through the mixture for 24 hours, 51 per cent. of the ether-soluble matter originally present had vanished.

Cohnheim contributes a long paper on the infusoria which

are met with in the human stomach and intestine, and their clinical import. He arrives at the following conclusions :—

1. Infusoria in the œsophagus and stomach indicate probably an ulcerated cancer of the œsophagus or stomach, which does not cause obstruction at the pylorus.

2. Infusoria may be considered as the first and almost certain sign of gastric carcinoma.

3. Living infusoria in the fæces are a sign of a primary chronic gastric disease (gastritis, usually atrophic), but are also indicative of severe entero-colitis.

4. Encysted infusoria may be met with in healthy persons who have previously suffered from gastritis or gastro-enteritis.

5. Infusoria (ciliata and flagellata) have no pathogenic, but only a symptomatic, diagnostic importance.

6. An attempt to destroy the infusoria is, therefore, irrational, and would probably tend to aggravate the real disease.

Glaser finds that in typhoid fever complicated by pneumonia the expectoration often contains the bacillus of Eberth. As it is accompanied by the pneumococcus or other organism it is doubtful how far the pulmonary affection is caused by the typhoid bacillus, but the possible dissemination of the latter by the sputum must be borne in mind.

H. Neumann maintains that Barlow's disease in children is due to poisoning by milk which has been overheated in the process of sterilisation, and that the proper treatment is to give either fresh or properly sterilised milk. Unless this is done antiscorbutic treatment is useless. He discusses the whole subject very thoroughly, and gives a considerable number of clinical records of cases of the disease.

Max Wolff has succeeded in producing typical *Perlsucht* in a calf by inoculation from a case of primary intestinal tuberculosis in a man. He thinks that the rarity of primary intestinal tuberculosis in the human subject is no proof that infection is not often due to food, such as milk, butter, and meat of animals suffering from Perlsucht. He agrees, therefore, with the resolutions passed by the London Congress on Tuberculosis regarding the dangers of infection from tubercular cattle.

Senator discusses the causation of cardiac hypertrophy

in renal disease. He is inclined to attribute it to a chemical irritation of the cardiac muscle by the altered composition of the blood; while the greater hypertrophy on the left side is due to the contraction and thickening of the arteries, also caused by the irritation of the vitiated blood.

Stadelmann writes a valuable paper on the diseases of the brain which supervene, after a period of apparent recovery, on injuries to the skull.

These few examples will suffice to show the great mass of interesting matter that is to be found in this volume of the Verhandlungen.

The Exact Science of Health, based upon Life's Great Law. By ROBERT WALTER, M.D. Vol. I. Principles. New York: Edgar S. Werner Publishing Co. London: Keegan Paul, Trench, Trübner & Co. No date. Pp. 302.

AT the beginning of this book we read that "it is not the vapourings of a novice, carried away on the wings of his enthusiasm, but the product of nearly half a century of earnest study and reflection." Then in large capitals the following sentence:—"Gravitation (force and law) gave us a reliable astronomy; chemical affinity gave us chemistry; while life's great law yields a correspondingly reliable vital science." With excited expectations and elevated hopes we turn to the expression of this law which is to raise biological problems to the exactitude of those of astronomy and chemistry, and we find the following:—

"LIFE'S GREAT LAW.—Every particle of living matter in the organized body is endowed with an instinct of self-preservation sustained by a force inherent in the organism, usually called vital force, the success of whose work is directly proportioned to the amount of the force and inversely as the degree of its activity." The author finds the closest analogy between this law and the law of gravitation. "Both declare the existence of a force which all experience proves to be inherent in the matter of their respective departments, and both work directly as the amount of the force and inversely as the degree of its activity which is the proper statement in both laws. It is the amount of the force rather than the

mass of the matter which they declare, and 'square of the distance' would seem to be but another way of declaring the 'degree of activity.' The essential truth in either case is the inherent nature of the force, which works attractively in the one case and self-preservatively in the other, to the performance of all function—the production of all phenomena."

We think our readers will excuse us from occupying more of their time, and filling up the valuable space of the DUBLIN JOURNAL OF MEDICAL SCIENCE by further extracts from or criticism of this work.

First-Aid in Accidents. By R. J. COLLIE, M.D., Knight of Grace of the Order of St. John of Jerusalem in England, Medical Superintendent of the Hygiene, Ambulance and Home Nursing Classes of the School Board for London; and C. F. WIGHTMAN, F.R.C.S., late Examiner and Lecturer on Ambulance to the School Board for London. London: George Gill & Son, Ltd., 13 Warwick-lane, E.C. Pp. 125.

THIS little book should prove a boon to lecturers on "first-aid" and ambulance work, who have in it a concise and adequate handbook which they can safely recommend to their pupils. The work is divided into chapters, each of which corresponds to the lectures set forth in the London School Board's Syllabus. The illustrations are numerous and accurate, while the printing leaves nothing to be desired.

The price at which the book is published (sixpence) should bring it within the reach of all those who attend first-aid classes.

Portfolio of Dermochromes. By PROFESSOR JACOBI, of Freiburg. English Adaptation of Text by J. J. PRINGLE, M.B. London: Rebman. 1903.

We have no hesitation in saying that the plates in Professor Jacobi's Atlas are most admirably executed, and in faithfulness and realistic presentation surpass most of the collections hitherto published. The process employed is that known as citochromy, the invention of Dr. Albert, of Munich,

and the reproduction of colours is obtained almost entirely by mechanical means apart from manual work. The great majority of the lifelike illustrations are taken from models in the Breslau clinic.

The object of the Atlas is not to illustrate the rarer forms of skin disease, but to furnish to medical men, teachers and students a handy and comprehensive series of illustrations of the skin affections most frequently met with in practice, in their various phases, and at a reasonable price, within the reach of all. This worthy object has been attained with remarkable success, and we can also congratulate Dr. Pringle on his terse and instructive letterpress.

The Atlas is well worth the money, and we heartily commend it to our readers. The only drawback, and one which can be easily remedied in future issues, is the lack of an alphabetical list of the illustrations, for no order or classification is attempted.

Diseases and Injuries of the Eye, with their Medical and Surgical Treatment. By George Lawson, F.R.C.S. Sixth Edition. Revised and in great measure re-written by Arnold Lawson, F.R.C.S. London: Smith, Elder & Co. 1903. Demy 8vo. Pp. 588, and 249 Illustrations.

This well-known and once popular book has not been revised since 1885, when the fifth edition was published. Mr. Arnold Lawson has now brought out the sixth edition, which, though based on the previous edition, is, in fact, almost a new treatise, so largely has it been re-written and brought up to date. Few who possess the original modest work will recognise in the present beautiful volume anything but a distant connection of the favourite of thirty years ago.

The endeavour of the present editor has been to present a work which will not only be of use to the student of ophthalmology, but will also prove valuable as a book of reference for the general practitioner. Several new features have been introduced. The chapter on each structure is headed by a brief anatomical outline which it is hoped will facilitate the study of the diseases of that particular structure.

Entirely fresh articles on "Elementary Optics," "Development of the Eye," "The Pupil," "Affections of the Eye in Diseases of the Nervous System," "Heterophoria," and a brief appendix have been added.

On the whole, the editor has fairly well succeeded in his task, but though we cannot go seriatim through each chapter, we note with regret that he has failed to describe, and barely mentions the most modern and certainly the best and most common-sense operation for the cure of entropion with trichiasis. To the rather antiquated and unscientific procedures of Burow, of Streatfield, and of Jaesche-Arlt, he devotes considerable space, and in the latter advocates the transplantation of the excised piece of skin into the intermarginal space. Such a practice the experience of many has condemned.

In describing Hotz's operation he says at the end, "The gap in the intermarginal space may, if considered advisable, be filled in by transplantation of a Thiersch graft or a piece of mucous membrane from the inside of the lip," and that is all he has to say about the transplantation of mucous membrane from the lip to the eyelid, a procedure which has done more to permanently cure entropion with trichiasis than all the other operations put together.

Mr. Lawson does not consider advancement of an ocular muscle should be undertaken in any patient under about eighteen years of age, and for younger patients he prefers tenotomy of the offending muscle.

His views on the use of correcting glasses will not receive universal endorsement; but, on the whole, we consider the work a reliable and satisfactory guide on the subject of which it treats, and we can recommend it as being for the most part well up to date.

A Manual of Ophthalmic Practice. By Charles Higgens, F.R.C.S.E. Second Edition, revised and edited by Arthur W. Ormond, F.R.C.S.E. London: H. K. Lewis. 1903. Pp. 345. Crown 8vo, with Illustrations.

The author states that the manual is intended entirely for students and general practitioners. It does not pretend to

go deeply into the subject, but merely to give as much information as is likely to be useful to those still engaged in their studies, or in general practice.

His object has been fairly well fulfilled, but in his attempt to give the necessary minimum he has often omitted much that, to our thinking, is important. The book is well and clearly arranged, well printed, and is on the whole a good book of its kind.

A Treatise on Diseases of the Anus, Rectum and Pelvic Colon. By JAMES P. TUTTLE, A.M., M.D.; Professor of Rectal Surgery in the New York Polyclinic Medical School and Hospital; Visiting Surgeon to the Almshouse and Workhouse Hospitals. With eight Coloured Plates and 338 Illustrations in the Text. New York and London: D. Appleton & Co. 1903. Pp. 961.

THIS book being, as the author states in his preface, practically the outcome of twelve years conduct of one of the largest special clinics for teaching and treating rectal diseases, should prove of great use to those interested in such diseases, not only on account of the author's own experience but also owing to his extensive quotations from the work of others.

With regard to the illustrations, those in the chapter on perianal and perirectal abscesses explain the various forms and situations in a good and clear manner. There are several coloured plates in the book which we do not think add to either its value or appearance, and we should have preferred to see more illustrations from actual photo- and photo-micrographs.

The operative treatment recommended for fissure *in ano* seems rather severe, while the author omits the simple treatment so largely in use, and which we think is quite sufficient to cure the majority of fissures without incising the sphincter muscle as he recommends.

One of the best chapters is Chapter XI., which deals with fistulæ. The illustrations are very good, and the treatment recommended seems thoroughly up to date and worked out on antiseptic principles, which are not usually sufficiently dealt with in books on this subject.

With his remarks on "colostomy in malignant tumours of the

rectum" (pp. 796) we agree, and those surgeons who perform colostomy on almost all cases of carcinoma where a radical operation cannot be undertaken, would do well to read them. The different methods of excision of the rectum are thoroughly gone into, and form a useful and interesting part of the book.

Lessons in Disinfection and Sterilisation. By F. W. Andrewes, M.A., M.D., F.R.C.P., D.P.H.; Lecturer on Pathology, &c., to St. Bartholomew's Hospital, London. London: J. & A. Churchill. 1903. Pp. 222.

The scope and object of this little book are sufficiently indicated by the following extract from the author's preface:—It "owes its origin to a practical class which I conducted in the summer vacation of 1902 for some of the Nursing Staff of St. Bartholomew's Hospital. It is an expansion of the lectures and practical work of which that class consisted, and I have been induced to publish it because there seems to be no elementary book which deals with the bacteriological aspects of disinfection in a systematic manner. Sterilisation and disinfection play so important a part in modern medicine, surgery, obstetrics, and public health, that their principles require to be understood by those who would practise them intelligently. They are problems in physics and chemistry applied to bacteriology, and can only be grasped from this point of view. The majority of those who are called upon to practise them have neither time nor opportunity for a complete course of bacteriological study, but it is not a difficult thing for any teacher to devise a short practical course of laboratory instruction which shall effectively teach the essential principles of disinfection. I have endeavoured in these pages to set forth the outlines of such a course.

"The book is written for those who know no bacteriology, but who have sufficient acquaintance with its principles and methods to be able to understand what they are doing when they attempt to carry out processes of disinfection."

The author has succeeded in following out his programme to the letter. He has produced a unique little book setting forth the main points of bacteriology with admirable clearness

and absence of technicality, and showing how these points underlie the practice of disinfection. The earnest wish with which we close this little book (which costs but 3s.) is that every nurse would procure and carefully study it. Even qualified medical men might study it with advantage, affording as it does valuable information as to the best and most modern practice of sterilisation and disinfection in medicine, surgery, obstetrics, and public health. It is not all elementary. The explanation of ionisation at pp. 85 and 86, and the relations of this process to the germicidal properties of certain disinfectants—such as sublimate—is a very important one, and is given with great clearness.

We heartily congratulate Dr. Andrewes on having conferred so valuable a book on the medical and nursing professions.

Progressive Medicine: A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by H. A. HARE, M.D., Professor of Therapeutics in the Jefferson Medical College, Philadelphia, &c.; assisted by H. R. M. LANDIS, M.D. Vols. I. and II., for 1903. London: Rebman, Ltd. Pp. 450 and 437.

PROGRESSIVE MEDICINE is a Year-book published in four volumes yearly, at intervals of three months. In it are contained digests of the advances made in all the various branches of medicine. Each subject is completed for the year in its own volume. Thus in Vol. I., published in March, we have the Surgery of the Head, Neck, and Chest; Infectious Fevers, Pathology, Otology, and some other subjects. In Vol. II., published in June, we find Abdominal Surgery, Gynæcology, Diseases of the Blood, and Ophthalmology. Thus, anyone taking a special interest in one particular subject can learn about his own subject from one volume, and need not procure all four.

The contributors who have made the digests are naturally for the most part Americans, but we notice among them three British names—those of Drs. J. Rose Bradford, Ewart, and Turner (Edinburgh).

We look upon this as a valuable work of reference; the

digests have been carefully made. Their aim is to give a fairly full account of what the compilers think of value rather than to mention briefly all the points brought forward in a year's literature. Hence many important subjects are treated of at some length. The articles are written in a clear and readable style, and illustrations are introduced where needed.

In a Year-book such as this it is not desirable to pick out special points for notice. It is enough to say that the whole is up to a high standard.

Acute Dilatation of the Stomach. By H. Campbell Thompson, M.D. Lond., M.R.C.P.; Assistant Physician to the Middlesex Hospital. London: Baillière, Tindall and Cox. 1902. Pp. 54.

In this interesting monograph Dr. Thompson gives an excellent account of a morbid condition, rare indeed, but of great importance, seeing that it usually proves fatal when it occurs. It is met with in conditions of general weakness or debility, but the exciting cause may be of very varied nature—over-distention with food, a surgical operation, an injury. Dr. Thompson has himself seen five cases, which are fully described, and has collected from the literature of the subject notes of 44 others. The disease appears to consist in a rapidly-occurring paralysis of the organ, accompanied in most cases by a profuse secretion of fluid. The distended stomach forms a large cylinder, sharply bent on itself, forming a kind of V with one limb much the shorter. Treatment is usually futile, but in a few cases the assiduous use of the stomach tube has resulted in recovery.

Transactions of the Clinical Society of London. Volume XXXV. London: Longmans, Green & Co. 1902. Pp. 235.

As might be expected from the name of the Society, the most of the papers in this volume are practical in their scope. Many of them are of much interest. Dr. Moullin writes on the treatment of ascites by fixation of the omentum. He

considers that this operation involves but little danger to the patient, and that if it is to be successful it should be done early. Several surgeons write on cases in which the Gasserian ganglion was excised. Dr. T. S. Wilson contributes a valuable paper on the theory of compensation in mitral valve disease, in which he argues that in this form of lesion the circulation, during this stage of compensation, is maintained by increased aspiratory force on the part of the left ventricle, and not by hypertrophy of the right ventricle. Drs. Hale White and Parkes record a case of malignant endocarditis in which Widal's reaction was present, although there were no signs of enteric fever, and no typhoid bacilli could be discovered.

We have merely picked out a few papers which struck us. There are many others of equal importance.

The volume is quite up to the high standard of its series.

An Atlas of Illustrations of Clinical Medicine, Surgery and Pathology. Compiled for the New Sydenham Society (a Continuation of the "Atlas of Pathology"). Fasciculus XVII. (Double Fasciculus), being VI. and VII. of the New Series. Xanthelasma and Xanthoma; Changes in the Skin caused by Arsenic; Pemphigus and its Variants; Fractures and Dislocations; Miscellaneous. Plates A. to O., and xcviii. to cxvii. London: The New Sydenham Society. Agent: H. K. Lewis. 1903.

The title-page conveys a very good idea of the wide range of observations in clinical medicine and surgery contained in this portly instalment of the New Sydenham Society's Atlas. Its ruling spirit is, of course, Mr. Jonathan Hutchinson, F.R.S., to whom not only the Society but the profession at large owes so much. And yet the predominant influence of that clinical observer in itself opens the door to criticism. Thus, we are much better pleased with the caption on the title-page, "Changes in the Skin caused by Arsenic," which is no doubt indefinite, and therefore, perhaps, unscientific, than with the specific—shall we not say dogmatic?—description of a case of "Keratosis and Cancer from the use of Arsenic" (Plates cvi. and cvii.), of "Epithelial Cancer from Arsenic with Gland Implication"

(Plate cxiii.), and of "Epithelial Cancer from Medicinal Use of Arsenic" (Plate cxiv.).

Let us examine these cases a little more closely. We are informed that "the figures in this Plate (cvi.) show the palmar and dorsal aspects of the left hand in a man who had suffered from chronic psoriasis, had taken much arsenic, and who finally became the subject of arsenical cancer." . . . "The patient was a man past middle age, and on whose right hand one of the patches had assumed malignant conditions necessitating amputation of the finger." This case is further illustrated in Fig. 1 of the next Plate (cvii.). The descriptive letter-press states that "the microscope declared the conditions to be characteristic of epithelial cancer." But is it quite fair or reasonable to attribute the cancerous growth to arsenic? Is it not more likely that the presence of chronic psoriasis, which the taking of "much arsenic" had apparently failed to cure, was responsible for the development of "keratosis of the palms," and also of "epithelial cancer"?

Again, let us consider the case illustrated in Plates cxiii., cxiv., and cxv. The patient was a man aged forty-eight, who had been the subject of psoriasis from boyhood. Under the advice of the late Mr. James Startin, subsequently that of Sir Erasmus Wilson, and lastly that of Mr. Milton, he had taken many prolonged courses of arsenic. He finally, we are told, became the subject of cancer. In the Plates a "cancerous ulcer" is shown in the pubic region, the edges of which ulcer are everted and sinuous, but unattended by any large amount of growth. The right groin was occupied by a large mass of adherent glands, which at the lower end had ulcerated and left a sinus. There was, also, an ulcer on the skin of the back, superficial and of polycyclical borders, but there was no great amount of growth. The glandular mass in the groin continued to grow, and the patient sank exhausted by the ulceration and discharges. "*No opportunity for microscopic examination was afforded.*" Mr. Hutchinson holds that keratosis of the soles of the feet, which had been present for a year or more before the patient's death, was quite independent of his old psoriasis. He attributes it to the arsenic which had been

given, and not to the psoriasis. Well, surely, this is a matter of opinion, and Mr. Hutchinson passes by in silence the very serious reflection on the treatment pursued by the three distinguished dermatologists whom he names in connection with the case, which is involved in the theory he puts forward.

Since we are in a critical vein, we may here also lodge an objection to the derived meaning attached to the term "vaccination" in the description of a striking case of impetigo contagiosa represented in Plate c. Here is the sentence to which we take exception:—"Epidemics of this disease have been observed in connection with vaccination in football-players, in whom the contagion occurs from the jersey." "Vaccination" is here used in the sense of inoculation—a word which may fairly be employed in the case of any contagious disease without risk of misconception. Not so "vaccination," which should, in our opinion, be restricted to its original meaning of inoculation with the vaccine disease.

For the rest, we have nothing but praise for this costly and magnificent instalment of the New Sydenham Society's Clinical Atlas, which might almost be called "Hutchinson's Atlas." Certain it is that its publication has been rendered possible not only by the wealth of clinical and pathological material accumulated by Jonathan Hutchinson in his long and brilliant professional career, but also through the untiring energy and boundless enthusiasm of that indefatigable worker and thinker. *Floreat ad multos annos!*

Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition. By PROFESSOR C. VON NOORDEN, Senior Physician to the City Hospital in Frankfurt-am-M. New York: E. B. Treat & Co. Bristol: John Wright. 1903.

THESE handy and attractive little volumes, written by one of the foremost authorities (if not the very foremost) on the disorders of metabolism, will no doubt be received with welcome by English readers. The excellent translations have been made under the direction of Professor Boardman Reed,

of Philadelphia, and arrangements have been made for the simultaneous appearance of the English and German editions of the future volumes. The author tells us in his preface that "it has been arranged to have the collection contain not only dissertations from my pen, but also writings by my assistants and pupils—of course under my control and responsibility. The monographs are to express, above all, the personal views and observations of the writers; or they will contain collective presentations upon important questions. Only such subjects will be chosen as are of importance and interest to every physician."

PART I.—*Obesity: the Indications for Reduction Cures.* Pp. 59.

In the first essay, on Obesity, the author insists on the fact that reduction cures when properly carried out are not weakening. He shows the evils of routine treatment or the blind adhesion to any particular method of diet or other procedure, and points out what a happy hunting ground the treatment of obesity has hitherto offered to quackery. He then gives the indications for treatment in cases of simple obesity in otherwise healthy subjects, and for reduction cures in obesity complicated with other diseases. Among these complicating diseases the following are specially dealt with:—Diseases of the circulatory organs, particularly heart disease; diseases of the kidneys; chronic pulmonary diseases, particularly chronic bronchitis; chronic articular rheumatism, gout, and other diseases of the organs of locomotion; diseases of the nervous system, particularly neuralgia and hysteria; diabetes mellitus; and pulmonary tuberculosis, a disease which we are not apt to associate with obesity, but which in some cases under the modern scientific treatment is sometimes so complicated. It would be impossible to do the author justice by an abstract of his paper, as every sentence contains important matter. We can only say that the work (which runs to only 59 pages) should be carefully studied by every physician who has to undertake the difficult treatment of cases of obesity—cases which are, perhaps, not so frequent among us as they are in Germany and America.

The author's remarks are characterised by wideness of view and by caution; thus, with regard to the system of

excessive fattening carried out in so many sanatoria he writes: "I must raise my voice in warning against any exaggeration of this mode of treatment. Unfortunately such exaggerations are frequent now-a-days. I have followed a number of such cases, and I am not of the opinion that the condition of obesity renders these people more fit to struggle against the tubercular invasion."

The translation has been admirably done. The book will not take long to read, and will repay perusal.

PART II.—*Nephritis.* Pp. 112.

In the volume on Nephritis, after describing the customary treatment adopted in cases of acute and subchronic nephritis, and in contracted kidney, the author lays down the principle of physiological rest for the kidney. "Protective therapy in general is intended in the first place to save the diseased organ all superfluous work, and in the second place to eliminate all those irritants from the diet that might stimulate it to increased efforts." Great stress is laid on the uncertain indications which are given by fluctuations in the amount of albumin in the urine as to the good or bad effect of a certain line of treatment. It is further shown that the time after the administration of easily detected drugs (such as iodine, methylene blue) at which they appear in the urine is also an unreliable test for the power which the kidney has of eliminating the normal urinary ingredients. Of these it is found that in nephritis some are eliminated readily, others with difficulty. "The rule naturally suggests itself to exclude all those articles of diet that in process of metabolism form end products that are eliminated with difficulty, or at least to reduce them to the smallest possible measure." So we at once spare the kidneys and prevent the accumulation in the body of waste products. From this point of view the dietetic treatment of nephritis is discussed.

Should patients with acute nephritis be given a large quantity of fluid to act as a diuretic? Should milk be given in unlimited quantities? Should patients with contracted kidneys be kept on a mainly milk diet? or may they take meat; if so, are white meats better than beef and mutton? What is the effect of alcohol in Bright's disease? These

and other similar questions are the points the author sets himself to discuss.

In acute nephritis, recent cases of chronic parenchymatous nephritis, and acute hæmorrhagic nephritis occurring as an exacerbation of chronic contracted kidney, the following substances are excreted with difficulty—urea, creatinin, pigments, hippuric acid, phosphates, inorganic sulphates, potassium salts (?) and under certain circumstances, water. While uric acid, xanthin bases, aromatic substances, ammonia, amido acids, chlorides, carbonates, and under certain circumstances water, are readily eliminated. Basing himself on these experimental facts, and on a very large clinical experience, the author has written a very valuable essay, in which he gives us a more rational and scientific standpoint for our treatment of kidney disease than we find in any other book with which we are acquainted. We would most cordially recommend Professor von Noorden's work to all our readers, dealing as it does with a class of diseases which, unlike obesity, is as common here as in any other part of the world.

For the book we have nothing but praise. Professor von Noorden cares nothing for tradition. He has investigated for himself and has given us the result of his experience. Most of us—in fact, in some ways, all of us—are too prone to be guided by venerable authority; we easily fall into a rut, and we find it difficult to liberate ourselves. Such a book as this makes us think. We hope that many will read it.

PART III.—*Membranous Catarrh of the Intestines (Colica Mucosa).* Pp. 64.

The third essay, on Membranous Intestinal Catarrh, deals with a very troublesome disease whose nature is rather imperfectly understood, and whose treatment is generally highly unsatisfactory. From a long discussion of the pathology and treatment the following conclusions are drawn :—

"1. Typical colica mucosa occurs almost exclusively in subjects who have been suffering for a long time from constipation (usually so-called obstipatio spastica), or in subjects who still suffer from this affection.

"2. Chronic constipation alone, however, never produces colica mucosa. There must be in addition excessive irritability

and over activity of the glands of the large intestine that produce mucus. This over activity of the glands is not due to anatomic changes in the mucosa (inflammation), but is due to certain nervous influences. It occurs almost exclusively in persons who have a neurasthenic or an hysteric predisposition.

"3. In addition to the typical symptom complex of colica mucosa there are certain abortive forms that are described and explained in the text.

"4. The cure of colica mucosa presupposes a cure of the constipation. Any method of treatment that causes a complete and permanent disappearance of constipation will also cause disappearance of colica mucosa. The method that we have proposed is the best one for the treatment of the combination of colica mucosa and constipation that exists. We call it a dietetic exercise treatment of the intestine in contradistinction to the protective treatment that is usually employed.

"5. The general nervous state of the patients calls for particular attention, if for no other reason than that a continuance of the nervous disturbances exercises a deleterious effect on the functions of the bowels, and derangement of the bowel-action can precipitate a new attack of colica mucosa. Appropriate treatment of the nervous system should be combined with the dietetic treatment, or should follow it; it should not precede it. This is the correct plan, for frequently a cure of the digestive disturbances (constipation, the passage of mucus, pain) and an improvement of the general nutrition lead to an amelioration or a complete cure of the nervous system without any other treatment."

In the opinion of the author the treatment of this disease is mainly dietetic. He advises a diet rich in cellulose as being really more "digestible" in colica mucosa than a diet which leaves but little residue in the intestines. Under the influence of the former diet the stools become abundant and soft.

The dietetic treatment referred to above under 4 consists in the administration of what is called a coarse diet—brown bread, vegetables containing much cellulose, fruit with small seeds and thick skins, and large quantities of fat, particularly

butter and bacon. The results of this treatment have been very satisfactory:—Complete success in 79 per cent. of the cases; incomplete in 15.8 per cent.; permanent success in 50 per cent.; relapses in 13.1 per cent.; result unknown in 15.8 per cent.; failure in 5.2 per cent.

In our experience colica mucosa—paroxysmal attacks of abdominal pain followed by the evacuation of tough mucus in lumps, strings, or membranes—is not a very common disease in this country. However, Professor von Noorden's remarks will apply to many forms of intestinal trouble, and will be studied with advantage.

Although these volumes are called Parts I., II., and III., each is really a complete work in itself, and may be obtained separately from the others.

Catechism Series. Physics. Part I. Edinburgh: E. & S. Livingstone. 1903. Pp. 80.

This latest addition to the well-known "Catechism Series" discusses, in question and answer, the properties of matter, work and energy, statics and equilibrium, dynamics, hydrodynamics, the elasticity of bodies, and molecular physics.

From page 58 to the end of the booklet a number of useful calculations are worked out in illustration and by means of formulæ for uniformly accelerated motion from rest and with initial velocity. These formulæ are explained at page 11.

The student is strongly recommended to acquire a thorough working knowledge of these formulæ, and he is properly reminded that practice is essential for ability to apply them.

PART III.

SPECIAL REPORTS.

REPORT ON SURGERY.

By William Taylor, M.B., F.R.C.S.I.: Surgeon to the Meath Hospital and County Dublin Infirmary.

I.

In the "Annals of Surgery," for July, 1903, will be found an exhaustive paper by Professor von Mikulicz, M.D., of Breslau, Germany, on the Surgery of the Pancreas, his paper being based upon 60 cases from his own personal experience. He discusses the cause of the tardy development of the surgery of the pancreas under three heads:—

1st. The topographical relations of the organ—its hidden and protected position.

2nd. The difficulty of diagnosis, the main obstacle here again being its concealed position. Objective phenomena are thus difficult to elicit, and, when elicited the interpretation is often, or usually, uncertain. The subjective symptoms are just as indefinite. Experience has shown that in affections of the pancreas, which have been treated surgically, positive functional disturbances have been observed only in rare instances. At the present time most cases are operated upon when the diagnosis is only probable, and only after the abdominal cavity has been opened can a differential diagnosis be made.

3rd. The operation, so far as it includes the organ itself, is much more dangerous than an operation upon any other abdominal organ. This is partly the result of the fact that in most diseases of the pancreas, with the exception of cysts, the general condition of the patient is so low that his recuperative powers are markedly diminished, while a further danger lies in the peculiar physiological character of the gland itself. The escape of pancreatic juice seriously affects the peritoneum and neighbouring tissues. The

secretion from the injured pancreas leaking into the abdominal cavity can of itself so damage the peritoneum that death from this cause alone may result, as shown by a number of experiments and clinical observations of accidental injuries in man. The pancreatic juice mixed with blood has, no doubt, a very toxic effect, and can, in the so-called apoplexy of the pancreas, result fatally without the complication of bacterial infection. In this connection the author of the paper does not refer to the normal physiological secretion, but rather to the exudate from the injured organ.

Whatever operation may be done on the pancreas, we must take the greatest pains to prevent the secretion of the diseased gland from getting into the abdominal cavity. This may be done in two ways—either by turning the injured part inwards and closing it with deep sutures, so that the peritoneal covering is again in continuity, or by the use of the tampon.

Pancreatic diseases which concern the surgeon are divided into three great groups: —

I. Injuries.

II. Inflammatory processes, including pancreatic apoplexy and pancreatic calculi.

III. New growths and cysts.

I. In connection with injuries the problem presented to the surgeon is clearly that of arresting hæmorrhage, and preventing as much as possible the flow of pancreatic secretion into the abdominal cavity and the subperitoneal tissues. Both these problems may be solved by deep sutures and ligatures *en masse*, or by the use of the tampon, or both. When the pancreas is injured great stress is laid upon the importance of thoroughly washing out the peritoneal cavity with warm normal salt solution. The indication for operation depends not only upon the diagnosis of an injury to the pancreas itself, but also upon the severity of all the symptoms, especially and particularly the strong accentuation of such symptoms. These symptoms are: increasing anæmia, the physical signs of blood in the abdominal cavity, and peritoneal irritation. No definite rules can be laid down as to whether one should await further developments or proceed immediately to laparotomy in any given case.

The suspicion of a severe injury to the pancreas should encourage us to act quickly.

Severe injuries to the pancreas which are not submitted to operation terminate fatally almost without exception.

II. The author adopts Mayo Robson's classification from the clinical standpoint, and divides the inflammatory affections of the gland into acute, subacute, and chronic. The classification of Fitz into hæmorrhagic, suppurative, and gangrenous pancreatitis rather represents different stages of the disease with a common ætiology.

The following points have to be borne in mind in considering the ætiology of acute pancreatitis: —

1. The very slight tendency of pancreatic hæmorrhage to stop spontaneously.

2. The locally destructive and the general toxic action of the pancreatic ferments set free by the inflammatory and hæmorrhagic processes; and finally,

3. The ease with which the pancreas may be infected from the ductus choledochus.

The author considers acute pancreatitis as an acute phlegmon which, on account of the peculiar nature of the tissue, runs an unusually severe course.

As in an ordinary phlegmon, so in the pancreas, the only rational therapy is to open the focus of infection with the knife, and to empty and drain the toxic and infectious exudate. Gauze tampons will best combat the fatal tendency to hæmorrhage.

In the subacute forms the surgeon has time to observe his case more carefully. A delay in most of these cases is not inopportune, as the diagnosis is still more uncertain than in acute pancreatitis. Chronic inflammations of the pancreas were not regarded until recently as suitable for surgical treatment. Two things, above all others, have been learned in the last few years: —

1st. That chronic pancreatitis runs a course not dissimilar to that of pancreatic carcinoma, and has often been mistaken for it.

2nd. That active interference has often been postponed because we have been unable to properly recognise the condition of chronic pancreatitis, and have confounded it with

a condition beyond surgical relief. Another important point is the close relationship existing between chronic pancreatitis and diseases of the biliary tract. Gall-stones which become impacted near the papilla Vateri, even though small, have an important bearing in the development of chronic as well as acute pancreatitis. Infection arising from a cholangeiitis may spread through the pancreatic duct to the pancreas. On the other hand, a chronic pancreatitis of the head of the pancreas can easily simulate a cholelithiasis by compression of the common bile duct. From this it is evident that a chronic pancreatitis must always be considered in making a diagnosis of cholelithiasis; and, further, that with gall-stones and cholangeiitis, especially when the common duct is involved, one must be prepared to find a lesion also of the pancreas.

III. Owing to the uncertainty of the diagnosis of these conditions, an operation should always begin as an exploratory incision. The subsequent procedure depends on what is found. Calculi may be removed from the gall bladder or ducts, and the gall bladder and ducts drained by performing a cholecystostomy or cholecyst-enterostomy. In order to diminish the risk of retrograde infection of the biliary tract after cholecyst-enterostomy an entro-anastomosis, at a distance of about 10 centimetres from the original anastomosis, is immediately added, which deflects the intestinal circulation from the loop in connection with the gall-bladder.

The author urges early operation in cases of chronic pancreatitis, as severe disturbances of nutrition can occur following gradual degeneration of the organ.

Of the 60 cases the author personally operated upon, 30 were in association with cancer of the stomach. Of the remaining 30 cases, 10 were typical pancreatic cysts, of which two were removed and eight were incised and drained. All recovered.

Two cases of subacute pancreatitis were met with, and both evidently recovered after operation. Two cases of chronic pancreatitis were met with: one died, ten days after cystentro-anastomosis, from pneumonia. One was mistaken for carcinoma and lived four years after the laparotomy. One case of contusion of the pancreas, in which an immense

hæmatoma developed, recovered after operation—the hæmatoma being opened and drained.

Fifteen cases of malignant disease of the pancreas were encountered. In these exploratory laparotomy was done seven times, and cholecyst-enterostomy five times. Of the latter one died as the result of the operation. Once a gastro-enterostomy was done for a stenosis of the duodenum due to a pancreatic tumour. Once extirpation of a tumour in the head of the pancreas was done. All three cases ended fatally.

II.

Professor Hans Kehr (Habberstadt) has recently published the results of 720 laparotomies for gall-stones. His first operation was performed in 1890, and since that time he has performed 720 operations upon 655 patients. To understand the subject he strongly urges a careful study of the pathological changes produced by gall-stones. This he considers can best be done during operations, and he believes that calculi in themselves produce no symptoms. The symptoms produced by gall-stones arise only after infection takes place. Jaundice was absent in from 80 to 90 per cent. of his cases in which stones were lodged in the gall-bladder or cystic duct. Even when the calculi were lodged in the choledochus jaundice was absent in over one-third of the cases. He ascribes both the colic and jaundice to inflammatory changes in the majority of cases. A palpable tumour in the region of the gall-bladder is present only in acute, rarely in the chronic, cases. A cure of a case of gall-stones by internal medication seldom occurs. Where such a cure is supposed to take place this simply means that the inflammation has subsided, the calculi then remaining latent for the time. He considers it possible to make an exact anatomical diagnosis from the anamnesis or history, the physical signs and careful observation.

In case of chronic choledochus obstruction we must learn to distinguish between calculi and tumours. In the majority of cases he is now able to make a correct special diagnosis.

Kehr does not operate on every case which he examines. The presence of calculi is not of so great a value as an indication for operation as their pathological results—viz., in-

flammation and choledochus obstruction. His conclusions are: —

I. He believes medical treatment produces a latent condition in many cases: a cure in only some few.

II. He believes in Riedel's dictum to remove the stones as soon as discovered, for the patient will thus be protected against many of the dangerous sequelæ of gall-stones, but as such early operations cannot always be done in practice, Riedel's advice is of little practical value.

III. If the attacks are mild and there is a complete latency in the intervals, he does not advise operation.

IV. Acute obstruction of the common duct is generally to be treated medically; but, if symptoms of cholangeiitis become prominent, and the jaundice is associated with emaciation and anæmia for some time, an operation must be considered.

V. Frequent colics without jaundice or the passage of stones if causing invalidism are an indication for operation.

VI. Colics associated with jaundice and the passage of stones during each attack should be treated medically, but if the attacks are frequent, and the patient seems failing, he would operate.

VII. Dropsy and empyema of the gall-bladder, as well as pericholecystic suppuration are to be dealt with surgically.

VIII. Chronic choledochus obstruction should not be permitted to exist too long if a Carlsbad cure has been of no avail.

IX. Patients with gall-stones who have become addicted to morphin should be operated upon under all circumstances. The morphin habit can be cured subsequently.

X. Early operative treatment alone is of any service in carcinoma of the gall-bladder.

XI. Patients with chronic jaundice, which is not dependent upon a stone in the common duct or incurable disease of the liver, should be operated upon within three months at the latest, as a chronic interstitial pancreatitis instead of a suspected carcinoma of the head of the pancreas will often be found.

XII. The results of gall-stones, such as suppurative angeio-cholitis, abscess of the liver, perforative peritonitis,

subphrenic abscess, severe pyloric and duodenal stenosis as well as ulcers, all demand surgical interference.

Of the 655 patients upon whom Kehr operated 536 were women and 119 men.

In his first 360 operations the majority of the operations were cholecystostomies, 54 per cent. In the last 360 operations cholecystectomy and drainage of the hepatic duct predominate, 64 per cent. being cholecystectomies, while in 41 per cent. of the cases the hepatic duct was drained. In the first series only 20 per cent. were cholecystectomies, as compared with 64 per cent. in the second series, while in the latter the cholecystostomies were only 20 per cent. as compared with 54 per cent. in the first series.

He prefers cholecystostomies for all acute processes. In operations during the latent period he believes the gall-bladder should be extirpated. He prefers drainage to suture after the removal of stones from the common duct. During the past year he drained the hepatic duct in order to avoid recurrence. The mortality of cholecystectomy with hepatic duct drainage is not over 2 to 3 per cent. Adhesions around the neck of the gall-bladder can produce the same symptoms as gall-stones. In these cases the gall-bladder should be extirpated to avoid recurrence.

About 10 per cent. of the cases which consult a surgeon have carcinoma. Such patients have no symptoms until a tumour is palpable, and then operation is of no avail. Twelve per cent. of the cases were complicated with gastric affections, principally a stenosis, for which gastro-enterostomy is advocated in preference to pyloroplasty.

He makes it a rule to palpate the pancreas, and in case of disease prefers an anastomosis between the stomach and gall-bladder to any other operation.

His total mortality in the 720 laparotomies for gall-stones was 15.5 per cent., but if he were to exclude complicating operations, such as gastro-enterostomy, and hopeless cases, such as carcinoma and cholangeiitis, the mortality would only be 3.5 per cent.

The mortality of cholecystostomy was 2.1 per cent.; that of cholecystectomy, 3.1 per cent.; while that of drainage of the common and hepatic ducts was 6.5 per cent.

During the past two years he has lost only 2 per cent. of the common duct cases, owing to more rapid technique, which he considers absolutely essential in this operation.

If gall-stone operations are complicated with gastro-enterostomy the mortality rises to 21 per cent. If complicated with inoperable carcinoma or cholangeiitis, the mortality is 97 per cent.

The average mortality of uncomplicated cases of gall-stones is not more than 2 per cent. The hepatic duct is drained by opening the common duct in its supra-duodenal portion, and then a drainage tube is inserted for two inches into the hepatic duct, and the entire bile led to the surface for about fourteen days. This procedure is much less difficult than suture of the common duct, and not so apt to overlook stones. Gauze tampons are placed around the tube leading to the hepatic duct. He never observed fistula or stenosis or ascending cholangeiitis following hepatic duct drainage.

III.

In *La Presse Médicale*, for Saturday, July 18th, 1903, will be found a report of six cases of cancer, said to be cured by the "Cancroin" of Professor Adamkiewicz, of Vienna. In the same journal for January 22nd, 1902, he reported four cases of cancer of the œsophagus, said to have been cured by this special toxin. According to Adamkiewicz the toxin, considered from a chemical point of view, is a "trimethyl base of oxide of ammonium in double combination with phenol and citric acid." The present list of cases includes cancer of the tongue, cancer of the larynx, cancer of the stomach, cancer of the breast, cancer of the uterus, and cancer of the retina. Adamkiewicz explains the marvellous results he obtains by his conception of cancer. According to him, cancer is not an epithelial production, but a living entity which his serum kills and eliminates from the organism. Be it as it may, the Viennese professor does not pretend to cure all the cases which are presented to him. "It is clear," he says, "that when an essential organ has been compromised to such a state that it cannot recover its physiological functions, the patient succumbs even when freed from his cancer." From clinical experience he believes he is right in

affirming that "Cancroin" possesses enough power to cure cancer, to prolong existence in less fortunate cases, and in any event is never harmful. At first the injections are performed daily. The quantity of the serum generally employed on the first day is a $\frac{1}{2}$ cc. The dose is progressively increased, till as much as 1 cc. or $1\frac{1}{2}$ cc. In some exceptionally severe cases he has given 2 cc. Intense and even dangerous reactionary phenomena may be produced thereby. The treatment is suspended after the elimination of the cancerous element.

IV.

In the *Annals of Surgery* for August last will be found two papers—one on "Thyroidectomy and Sympathectomy for Exophthalmic Goître," by B. Farquhar Curtis, M.D.; the other on "The Surgical Treatment of the Exophthalmic Goître," by John B. Deaver, M.D. The summary of the somewhat lengthy paper by Dr. Curtis is as follows:— Exophthalmic goître can be cured both by thyroidectomy and by sympathectomy. A perfect result can be expected in about 60 per cent. of the cases of thyroidectomy. Sufficient time has not elapsed to judge of the permanency of the cure, but the immediate results of sympathectomy are far superior to those of thyroidectomy. The relative mortality of the two would also seem to favour sympathectomy (Kocher, four deaths in 59 cases of thyroidectomy or ligature only: Jonnesco, none in 14 bilateral sympathectomies). In the authors' own cases the proportion is the opposite. There seems to be a serious danger of fatal acute thyroidism after both operations. It seems wiser to use local cocaïn anæsthesia for thyroidectomy, and to give it a trial also in sympathectomy. Sympathectomy should be performed on one side only at a time, with an interval between the operations sufficiently long to permit the patient to recover from the effects of the first operation.

The conclusions Dr. Deaver arrives at from his own observation and from a study of the work of those whose experience has been extensive are:—

I. That as surgical treatment is recognised as the most satisfactory in Exophthalmic Goître, so is complete bilateral

cervical sympathectomy to be considered the operation of choice.

II. The operation should not be performed during the height of physical irritation or tachycardia, nor by the operator who has not an absolute knowledge of the anatomy of the neck and a large experience in dealing with difficult operative procedures, or the means at hand to cope with any emergency.

III. The results of sympathectomy are far better than the other procedures, the mortality is much lower, and in cured cases the improvement is permanent.

CRUELTY TO ANIMALS.

In the July issue of *The Humane Review* is to be found an article by the Right Rev. Mgr. Canon John S. Vaughan, which will be found well worthy of perusal by all thoughtful and cultured readers. The title is—"Cruelty to Animals and Theology: A Reply." He gives the orthodox teaching of the Roman Catholic Church at present on this much-debated subject. He takes for the (duplex) text of his discourse two quotations from the published opinions of two lately-deceased English Cardinals. "*We have no duties towards the brute creation;* there is no relation of justice between them and us. Of course, we are bound not to treat them ill, for cruelty is an offence against that holy law which our Maker has written on our hearts, and it is displeasing to Him. But they can claim nothing at our hand; into our hands they are absolutely delivered. We only use them; we may destroy them at our pleasure, not our wanton pleasure, but still for our own ends, for our own benefit and satisfaction, provided that we can give a rational account of what we do." The above are the words of John Henry, Cardinal Newman. The second quotation is from Cardinal Manning:—"It is true that man owes *no duty directly to the brutes*, but he owes it to God, whose creatures they are, to treat them mercifully." Starting from these expressions, the reverend writer explains in full the present teaching of the Roman Catholic Church on the subject of *cruelty to animals* in general, and on *vivisection*, in particular. The article is most brilliantly written, and its reasoning throughout is of the most exquisite subtlety. We do not feel called upon to express a further opinion, but cordially recommend its perusal to all our readers.

HOPKINSON'S

LIQ: COLCHICINÆ SALICYLATIS

Gives Immediate Relief in all Cases of

RHEUMATOID ARTHRITIS, CHRONIC RHEUMATISM, GOUT and LUMBAGO.

Each fluid drachm contains $\frac{1}{32}$ grain of Salicylate of Colchicine.

HOPKINSON'S LIQUOR COLCHICINÆ SALICYLATIS (Baiss Brothers and Stevenson, Ltd., 4, Jewry Street, London, E.C.)—For the treatment of that elusive condition called gout no drug is so uniformly successful as colchicum. Every practitioner knows that success is not invariable, and, we think, for reasons not so obscure as may be imagined. In the first place the corm, or seeds, does not contain a constant proportion of alkaloid, and the method of extraction is not always equally efficient. No doubt standardisation will improve matters in the future, but we think the best means of securing the proper action of the drug is to administer the active principle—the alkaloid-colchicine. Hopkinson's Liquor Colchicinæ Salicyl contains $\frac{1}{32}$ of a grain of the salicylate of colchicine in a drachm. This is not a mixture of salicylic acid with the alkaloid, but a definite chemical compound GIVING RESULTS MUCH MORE CERTAIN THAN THOSE OF ANY PREPARATIONS OF COLCHICUM. For gout, chronic rheumatism, and rheumatoid arthritis it is a valuable acquisition, especially as it does not interfere with the action of the kidneys and liver, and does not produce any depressing effect. The liquor is a convenient and elegant preparation. "*Medical Review.*"

DOSE.—A TEASPOONFUL DILUTED, TWICE A DAY BETWEEN MEALS.

PRESCRIBE—Liquor Colchicinæ Salicyl (Hopkinson's).

TESTIMONIALS.

Eastwood, April 29th, 1893.

Dear Sirs,—I have now prescribed your **Liquor Colchicinæ Salicyl** for several months **with marked effect in every case.** Before it was brought under my notice in the *Lancet*, I never prescribed the ordinary remedies with any confidence. Your spécialité, however, gives me the utmost satisfaction, and I can confidently recommend it to my brother practitioners. It has no depressing effect on the heart.

I am, dear Sirs, yours faithfully,

——— ——, M.R.C.S., Eng.

Pleasley, Mansfield, May 18th, 1893.

Gentlemen,—I have much pleasure in testifying to the great benefit I have experienced from the use of your **Liquor Colchicinæ Salicyl** in my own case for lumbago. During the 18 months I have used it (for three separate attacks) it has **not failed me once.** I have **always experienced relief** within half-an-hour of the time of taking the first dose, and three or four doses have invariably succeeded in subduing the attack, and that without causing any unpleasant effect whatever, or even necessitating confinement indoors. I regard it as a valuable remedy for this and similar complaints. I shall take care to have it by me for personal use, and shall prescribe it to my patients.

Yours faithfully,

—— ——, M.B., C.M. (Univ. Aberd.)

Great Grimsby.

Dr. Smith would be much obliged if Messrs. Hopkinson & Co. will send him, for his own use, another bottle of **Liquor Colchicinæ Salicyl. He has derived great benefit from it.**

London, W., May 15th, 1893.

Dear Sirs,—I have found your **Liquor Colchicinæ Salicyl** of great value in my own case. I was soon quite relieved from pain, after having been ill for a long time with rheumatic gout. I have prescribed and recommended it to a great many people since, **and have heard good results in every case.**

Yours truly,

——— ——, F.R.C.S., Eng.

Extract from the "BRITISH MEDICAL JOURNAL."

"A preparation which is said to be very successful in the treatment of Chronic Rheumatism, Gout and Lumbago, is prepared under the name of **Liquor Colchicinæ Salicyl** (Hopkinson); 60 minims diluted contain $\frac{1}{30}$ of a grain of Salicylate of Colchicine.

Oldfield, Bath, 22nd, Dec., 1897.

I have chosen a good opportunity for a trial of your **Liquor Colchicinæ Salicyl. The beneficial effect was almost instant** and yet was enduring. There was no nausea.

Plymouth, 15th Jan., 1902.

Liquor Colchicinæ Salicylatis has recently given **very good results** in a troublesome case of gout, which had been under the usual treatment for some weeks. It has answered admirably in my hands, I shall always use it.

London, 26th May, 1902.

Thanks for **Liquor Colchiniæ.** I have taken two doses and can now walk properly, which I have not been able to do for about a month.

Mist. Bismuthi Aromat. (BAISS)

THIS valuable remedy has been much appreciated by the Medical Profession, for the past 32 years. It is useful for Dyspepsia, Gastric Distress, Impaired Digestive Powers, and Gastrodynia. It is an elegant compound, very palatable, *retained by the most enfeebled patient*, and has no precipitate. The component parts are on every label—it is no secret formula. Each teaspoonful contains 1½ minims Acid Hydrocyanic B.P., $\frac{1}{32}$ grain Morphia, 6 minims Tinct. Nucis Vom. with Bismuth, in its most efficacious form and Chloroform.

Dose.—One fluid drachm.

Sold in 1 lb. bottles 4/-, 2 lb. bottles 7/9, 4 lb. bottles 15/- each.

PRESCRIBE—Mist. Bismuthi Aromat. (Baiss.)

Mist. Bismuthi Aromat c Pepsin.

(BAISS)

Is identical with above preparation. with the addition of 2 grains Pure Pepsin Porci in each fluid drachm.

Dose.—One fluid drachm.

Sold in 1 lb. bottles 4/6, 2 lb. bottles 8/6, 4 lb. bottles 16/- each.

EXTRACT FROM THE "PRACTITIONER," July, 1903.

"The Treatment of Gout in its various forms,"

By ARTHUR P. LUFF, M.D., BSc., F.R.C.P., etc.

"As regards the use of lithium-salts in the treatment of gout, my opinion is that they are not so useful as the potassium- and sodium-salts. The lithium-salts have not the same inhibiting effect on the conversion of gelatinous sodium biurate into the crystalline form as the potassium-salts have, while at the same time they have no better solvent effect on gouty deposits. The great objection, however, to the use of the lithium-salts is their greater toxicity and depressing action on the heart as compared with the potassium-salts. They consequently have to be given in such small doses that I am very doubtful as to whether in such doses they possess any remedial effect at all. On the other hand, I constantly meet with patients suffering from cardiac depression as the result of the excessive and continued consumption of lithia-tablets, which are so persistently, so speciously, and so wrongly vaunted as curative of gout."

PART IV.

MEDICAL MISCELLANY

Reports, Transactions, and Scientific Intelligence.

INTRODUCTORY ADDRESS.[a]

By Sir Philip C. Smyly, Surgeon to the King in Ireland, and Surgeon to the Meath Hospital.

It has come to my turn to address you to-day, and thereby open the Session for 1903 and 1904. This year completes the third Jubilee of the Meath Hospital and County Dublin Infirmary. Meath Hospital students are to be found all over the world, and wherever they are found they are in good positions and do credit to themselves and to the hospital where they learned their art; and whenever you meet them they say, "How goes the old Meath?" "I must some day have another look at the old Meath." This, ladies and gentlemen, is a term of affection and not a reflection on the age of the hospital or of the medical staff, for I believe the combined ages of the staff usually come to very much the same total when added together. It has ever been the usage of the Meath that as men drop off at one end, young men who have made a reputation for diligence and earnestness in their work are added on at the other end. Thus we have always had zeal gaining experience at the junior end—experience with as much zeal as is possible under the circumstances at the other end.

Since the last time I opened the Session there have been many changes. One of the most serious I count the death of Sir William Stokes. He was a true friend, a true gentleman, and a distinguished surgeon, who gave up his life in the service of his Queen and country, but not until he had made a great reputation for himself, and perpetuated the reputation of his father, William Stokes, in his memoir of that great physician, who with Graves made the Meath Hospital famous all over Europe. Trousseau, the great French physician, is reported to have said: "In my Graves and Stokes I read daily as I do in my breviary." This

[a] Delivered at the Meath Hospital and County Dublin Infirmary at the opening of the 151st Session, 1903-1904, on October 12th, 1903.

volume by Sir William every Meath Hospital man should have among his books. It is a well-told history of a great physician, and shows how a great name can be made.

Sir William Stokes was one of the first in Dublin to adopt Listerism, and by his practice and eloquent addresses at various medical and surgical societies and congresses did much towards the adoption of Listerism all over the world. The new operating theatre, where we have every contrivance to enable the surgeon to practise aseptic surgery, was in no small measure due to the earnest and active co-operation of Sir William Stokes. Doubtless some of you may remember the instructive address given in this hospital by the late Mr. Patteson on antiseptics. Though such a short time a member of the staff he won the esteem and respect of his colleagues. This whole subject is now so well known that I will not take up your time by any panegyric; but I will mention a few of the surgical possibilities which have now become daily facts, and could not have been thought of before Lord Lister. I remember the time when Sir James Y. Simpson brought a resolution before the Governing Body of the Infirmary in Edinburgh to prohibit any more operations in the hospital, and also to build a small hospital outside the city, whither all operation cases were to be sent, and where operations were to be performed. Then came Lister and began his great revolution. Sepsis and microbes were banished and surgery again flourished. Since that time organs that no surgeon ever thought of treating are within surgical reach. For example, the prostate gland can now be removed, and you will find in *La Presse Médicale* for the 19th of August, 1903, an article by Jarvis et R. Proust on "La Méthode de Freyer." Dr. Freyer is an Irishman in very large practice in London, and is a most distinguished member of that great Association known as the "Irish Graduates' Association," which has done so much for Irishmen practising in England. To this Association is due the removal of an order that no Irishman should hold hospital appointments in England. It is an Association which every Irish medical man should join wherever he may live, whether in Ireland or England, or in the Colonies of this great Empire. The kidney is an organ now within the reach of the surgeon, and many and various are the operations on it, followed by most brilliant results. Care should be taken before removing a kidney to see that there is a second to carry on the work, for it has happened that the only kidney present has been unfortunately removed, with of course fatal results.

I have just received a very interesting note from Dr. Freyer describing Edebohls' operation on the kidneys for Bright's disease, which he did on the 17th of June last. He writes:—

"I rapidly cut down on, and decapsulated completely one kidney after the other, the whole operation lasting thirty minutes. The operation was borne well; and, to my astonishment, a magical change for the better was established during the first few days, the functions of the kidneys being re-established. The child was taken to the country after a fortnight. I saw him once down there since, and have heard off and on from the parents. 1. The case is not a fair test of Edebohls' procedure, as the disease was too far advanced. 2. The operation undoubtedly prolonged the child's life. Though not convinced by the record of the cases published by Edebohls beforehand, I am bound to confess that the almost miraculous change in the lad's condition after the operation inclines me very favourably to operating in cases where the disease is not so far advanced."

Recently the pancreas has become of surgical interest. Von Mikulicz-Radecki (*Annals of Surgery*, July, 1903) publishes his personal experience of operative interference for disease of the pancreas, which, he points out, is at the present time the most incomplete chapter in the realm of abdominal surgery. Besides thirty cases in which this surgeon had the opportunity of operating upon the pancreas while resecting the stomach for cancer, he has operated directly on the pancreas itself thirty times, and with very good results.

The two great subjects which are interesting both the profession and the public now are—

TUBERCULOSIS AND CANCER.

I think, though our hopes have many times been dashed, that there will be some good results from the deliberations of the "Cancer Research Fund." The joint annual meeting of the General Committee of the Cancer Research Fund was held on July 30th last. The Report of the first year's work was submitted by the Executive Committee, and its adoption was moved by Lord Strathcona. He said the work of research had now been thoroughly organised, and expressed the opinion that in view of the millions who were interested in its results it seemed remarkable that only 213 persons figured on the list of subscribers. A further appeal to the public he thought ought to be successful in getting in the £40,000 or

£50,000 which was still absolutely necessary to enable the research to be thoroughly prosecuted. He understood that the Report had been approved by their President, H.R.H. the Prince of Wales. I will read you an extract from Mr. Balfour's reply[a] to a vote of thanks moved by Sir William Broadbent.

"Mr. Balfour expressed his pleasure at the motion, and joined in the general regret that the Prince of Wales had been unable to attend himself. He was not, he thought, going beyond his duty if he stated that the Prince was not content merely to watch proceedings as an outside spectator; on the contrary, he had actively interested himself in the Report, and was as zealous as ever in furthering the great work upon which they were all engaged. . . . It seemed to him that many, both of the public and the medical profession, were inclined to be unduly pessimistic as to what would be the outcome of the research. The inquiry was undoubtedly one of great difficulty, but he thought they were wrong in being discouraged. He would like to remind the audience of the immense difference between medicine and medical science as it was at the beginning of this century and what it was one hundred years before. The progress since 1800 had been immense. He had no reason to doubt that the progress of medicine would be as rapid in the future as it had been in the past. . . . For himself he took comfort and encouragement from the very point which to some seemed a cause of discouragement, and that was the very breadth and sweep of the inquiry.

"Isolated research by individuals had been going on for years all over the world, but what was wanted was what they were now trying to effect, and that was the linking up and co-operation of all those who, whether through their work as practical physicians and surgeons or through their scientific attainments as biologists, could help to turn darkness into light, and reveal the cause and origin of the disease itself, and the cause of its special distribution as regards age, sex, and locality.

"In conclusion, he desired to impress on the public, so far as his voice could reach it, to come forward in a liberal spirit, not too impatient of results, not too anxious to receive a dividend in discovery for every subscription, but anxious to endow that great machinery for research of which they were in charge in a way which, by the accumulated learning and experience of years,

[a] British Medical Journal. August 8, 1903. P. 317.

would do something to relieve mankind of what was after all one of the greatest curses under which humanity groaned."

The various forms and modes of application of electricity to cancer have for the last few years been of the very greatest interest, not only to the medical profession, but to many of the general public. The *Brit. Med. Journal* says: "The matter is one that particularly concerns men of business and those actively engaged in productive work of any kind, for cancer is, at the present day, the great destroyer of careers, 'the abhorred shears that cuts the threads of countless useful lives.'" Dr. Bashford says it is extremely difficult at the present time to estimate the effects of treatment. "The results so far brought to our notice do not establish the efficiency of any of these measures (the Finsen light, high frequency currents, and X-ray) as curative agents in sarcoma and carcinoma." His conclusion is that at present, "when so much activity is displayed in developing electro-therapeutics, it will be well to regard the whole question as still *sub judice*;" and yet in the medical journals we have reports from time to time of cures—for example, in *La Presse Médicale* for 19th of August, 1903, we have a case of cancer of the breast cured by X-rays. The patient, seen for the first time in 1903, had cancer of the breast from 1901. This cancer had lately ulcerated, and caused cruel sufferings to the patient; it was accompanied by numerous axillary nodules, Mons. Mondain (du Havre) and M. Marion decided to try X-ray. They placed at a distance of 20 to 30 centimetres a soft tube (*ampoule molle*); at the second sitting the pain diminished completely, and at the thirty-ninth day from the commencement of the treatment the cicatrisation was complete, notwithstanding the delay due to a radio-dermatitis which intervened.

That horrible disease lupus, which for so long was called cancer, but which we now know as tubercular, is rapidly becoming amenable to treatment. It is not long since a careful curetting was followed by very good results, and, no doubt, many of the relapses are due to neglect of subsequent treatment. In the *Dublin Journal* for August you will find a paper by C. M. O'Brien, M.D., "Experience of a Year's Trial of the Light Treatment for Lupus," and his results are most satisfactory. He not only uses the Finsen light, but also the X-rays. Dr. O'Brien says: "If my opinion as to the permanency of cure were solicited I should say that the Finsen light in this respect has no superior. In this belief I am strengthened by experience derived from personal examination of

many cases at the Finsen Institute, Copenhagen, which were cured and had remained so, from one to six years, and are still so, I believe. I am further of opinion that in the treatment of circumscribed superficial lupus the Finsen light has no equal." It is a paper well worth reading.[a]

Here I should like to call your attention to pulmonary tuberculosis, known to the public as consumption ; of late years much has been learned, though there is much still to learn, with regard to its treatment. I would particularly call your attention to the third Report of the National Association for the Prevention of Tuberculosis, and especially to the motto on the outside cover, due to His Majesty the King, who said, as Prince of Wales—

> "Consumption is a preventable disease.
> If preventable, why not prevented ?"

The Report, p. 9, says : "Much of the work of the Branch during the past year has been devoted to the spread of information (education) in the schools and through the Press on the subject of tuberculosis." I would also call your attention to a very clear and useful pamphlet by the Roman Catholic Curate of Ballinrobe with a preface by Sir Francis Cruise, published by the Catholic Truth Society of Ireland, and to Mr. Culverwell's paper in the *Dublin Journal of Medical Science.* It would be well for the Dublin Branch of the National Association for the Prevention of Tuberculosis to reprint this excellent paper for general circulation. Would it not be a great help towards stamping out this dreadful disease if Christian men of every church were to join in helping forward the great and good work of prevention ? Prevention is better than cure. But much can be done towards cure. Dr. Henry M'Cormack, of Belfast, was one of the first to teach fresh air and good feeding as the cure for consumption. The outcome of this knowledge is the great development of the sanatorium in every part of the world. One of the chief uses of the sanatorium is that it is in itself an educational institution, not to teach science so much as common sense ; to teach sufferers how to live, and how not to infect others. There is no doubt at present but that high air is a very important factor in the treatment of disease. In the *Davos Courier* for some time past there have been some very good articles on "Altitude and Health."

There is to be a large British Sanatorium at Davos, to be called

[a] There is probably a great future for the extraordinary substance called Radium, which is as costly as it is wonderful—30,000 francs a gramme (£1,200).

the "Queen Alexandra Sanatorium for Consumption." The Report of the Bâle Sanatorium at Davos is of the greatest value in ascertaining the real worth of the Davos climate. The Bâle Sanatorium was founded in 1896 by the City of Bâle; and the patients, mostly of the working classes, pay only very small fees, the balance being made up by voluntary contributions and donations. "Dr. Alexander Spengler, a German doctor, who settled at Davos about the middle of last century, was the first to make a practical application of the method, and to supply from his own practice and experience the beginnings of the data on which the high-mountain treatment of phthisis is based. In the course of his practice in the then almost unknown valley of Davos he was struck both by the fact that the inhabitants of this high region (over 5,000 feet above sea level) enjoyed almost an immunity from consumption, and that those persons who came up from the low-lands suffering from the disease, rapidly and thoroughly improved in health. So impressed was he by these observations that he induced several sufferers from the complaint to try the effect of the climate; the experiments were entirely successful, and this was the beginning of Davos as a health resort." In the Report, the medical officers in charge are fully convinced that the town of Bâle did a wise thing when it built this sanatorium at Davos instead of at Bâle itself. Dr. E. Nienhous, Medical Director of the Sanatorium, comments on the great industry which has been displayed of late years in the erection of sanatoria in Germany, and his remarks apply with equal force to England and Ireland. "During the past few years," he says, "the sanatorium movement, especially in Germany, has reached very large proportions. Sanatorium doctors, as well as university professors, thus deny the favourable influence of the high-mountain climate, and lay all the weight on the sanatorium treatment alone. Now, however, when it has been discovered that the sanatoria have not accomplished in this combat against tuberculosis all that was promised for them we shall find that opinion will gradually come again to lay stress on the influence of climate."

EDUCATION.

With regard to the education of the medical student, great advances have recently been made. I should advise all students to read carefully the Educational Number of the *British Medical Journal* for September the 5th, 1903, on the advantages and disadvantages of the profession of medicine; there are some valuable

hints in it as to the preservation of the student's own health, and how to fit himself to meet emergencies. It is well worth careful study. It is most important for a young man to make up his mind as to the line of practice he means to adopt, first with regard to the services—the Navy, Army, and Indian Service; and last, though not least, the Poor Law and private practice. Of late the Navy and Army Services became most unattractive, and many teachers, both in England and Ireland, advised their pupils to avoid them, and seemingly with the best results, for on p. 487 in the *Brit. Med. Journal* you will find the following:—"We are glad to learn that in the last two years much energy has been devoted to improving this Service (Army Medical). In order to consider the necessary steps and to assist the Secretary of State an Advisory Board has been created. Some of the most eminent civilian medical authorities have given to it their voluntary services and much of their time. Sir Frederick Treves expressed his belief that the Army Medical Service would be made 'the finest Service in the world in time,' when reforms in contemplation could be carried out." In the Navy and Indian Medical Services many and great improvements have been made, so that we may now look to the Services as a career in life for the best men in our profession.

Many men must stay at home, and therefore it becomes a duty to endeavour to make the home career as good as possible. I am told by some that they live very happy lives in the country. For myself I entirely agree with the man who said: "My dear sir, the country is a delightful place to spend a day or two; but show me any place in the country where you can have the comfort and security of the paving stones." Much useful advice was given the other day by my friend Mr. Tobin in his Introductory Address when opening the Session at St. Vincent's Hospital about the Poor Law Medical Service. But wherever you may cast your lot always bear in mind that you are gentlemen, and cultivate those great virtues—reverence and hopefulness—which Sir Dyce Duckworth urges so strongly in his great Address in Liverpool on the occasion of inaugurating the first Autumn Session of the Faculty of Medicine in the new University, reported in *British Medical Journal* for the 3rd of October, 1903. I will quote a few passages from it. He says: "I address many amongst you who are now at the outset of a career in medicine. To equip yourselves fittingly for that profession will demand some knowledge of the several sciences on which the science and art of medicine are based. I say some

knowledge, for you cannot in the nature of things become expert as students in any one of them. Medicine has been well termed 'a jealous mistress'; and if you are tempted to linger by the way in undue prosecution of one or other of the preliminary scientific studies you may be sure that you will lose your balance and never attain to excellence in practical medicine. The modern curriculum while demanding adequate knowledge, yet affords none too much time for the work to be done. You may never venture to relax your efforts from to-day, till such time as you cease to face your examiners; and it should be your earnest endeavour to be ready for each appointed examination that awaits you. Those who have experience as examiners know well the difference between candidates who have had the benefit of a liberal education before they entered upon medical study. . . . As with the literary, so with the preliminary scientific part of your training, both should be accomplished before entering on the direct studies in medicine, and the tendency now and for the future is to remove the scientific work from the hospital schools altogether, and to relegate it to late school-life, or the first academic year in a University. In thus recasting the curriculum the student is set free to devote his whole time and energy to learning his profession, and enabled to utilise to the full the opportunities afforded by his medical teachers and his hospital." . . . He then goes on to say: "The history of medicine has been too little taught and studied in England, and some measure of the failure to render due reverence to the work of the past is probably due to ignorance of it. . . . I venture to suggest that in all examinations for the Doctorate in Medicine some part should relate to the History of Medicine. This subject could hardly be dealt with in any previous examinations. Such studies as I have just urged will certainly tend to show you which way your genius lies, and you will come to agree with Kingsley, who declared that he had no respect for genius where there was no strength and steadiness of character to support it. Let me add to all this, and inculcate the reverence that is everywhere due to the body of man in life or in death, whether in your daily intercourse in the world or in your relations with the sick, and especially in your studies in anatomy and pathology. In few vocations are men more compelled to revere and respect our common humanity than in ours; and we are never permitted to forget that our bodies, whether in vigour or in decay and repulsiveness, are designed to be temples of the Holy Ghost."

WEST AFRICAN MEDICAL STAFF.

THE following information for the use of candidates for appointments in this Corps has been issued, as a Fourth Edition, by the Colonial Office, under date August 18, 1903 :—

1. The medical services of the West African Colonies and Protectorates (viz., the Gambia, Sierra Leone, the Gold Coast, Lagos, Southern Nigeria, and Northern Nigeria) form one service under the above name. All the medical officers for the service are selected by the Secretary of State for the Colonies, and are on one list for employment and promotion.

SALARY AND ALLOWANCES.

2. The grades and salaries of medical officers are shown in the following table :—

Grades	Gold Coast, Southern Nigeria, Northern Nigeria			Sierra Leone, Lagos			Gambia		
	Minimum Salary	Annual Increment	Maximum Salary	Minimum Salary	Annual Increment	Maximum Salary	Minimum Salary	Annual Increment	Maximum Salary
	£	£	£	£	£	£	£	£	£
Principal Medical Officer - -	1,000	50	1,200	800	50	1,000	—	—	—
Deputy Principal Medical Officer	700	25	800	—	—	—	—	—	—
Senior Medical Officers - -	600	20	700	600	20	700	500	20	600
Medical Officers -	400	20	500	400	20	500	400	20	500

3. The allowances are as follows :—

(*a*) *Duty Pay.*—A Deputy Principal Medical Officer or Senior Medical Officer receives duty pay at the rate of £100 a year while acting for the Principal Medical Officer.

In the Gambia a Medical Officer while acting for the Senior Medical Officer in charge of the Medical Department receives duty pay at the rate of £50 a year.

Duty pay at the rate of £60 a year is also paid (1) to each Deputy Principal Medical Officer or Senior Medical Officer while employed in Ashanti or the Northern Territories of the Gold Coast, and

(2) to not more than two officers of either of those ranks in Northern Nigeria, when similarly employed in outlying districts, at the discretion of the High Commissioner.

(*b*) *Horse or Hammock Allowance.*—An allowance of 2s. 6d. a day is paid to every medical officer for personal conveyance while on duty at his station, for any periods during which he was required by Government to keep, and has actually kept, a horse, carriers, &c., for the purpose.

(*c*) *Transport of Stores.*—The Government carries free of cost a reasonable amount of stores for every medical officer, the amount in each case being fixed by the local Government.

(*d*) *Travelling.*—Medical and other officers travelling on duty in a Colony or Protectorate are entitled to repayment of any actual out-of-pocket expenses which they may necessarily have incurred. In some cases, in lieu of the repayment of expenses, a travelling allowance is given, which is estimated to cover the average cost of travelling.

(*e*) *Field or Bush Allowance.*—An allowance of 5s. a day is paid to all medical officers, whatever their rank, while employed in the field or bush, away from recognised stations. Officers, while in receipt of this allowance, are not entitled to any repayment or allowance under (*d*) above.

(*f*) *Allowances on a Military Expedition.*—All medical officers, whatever their rank, while employed with a military expedition, will be paid an allowance of 10s. a day; and they will also be given free rations, or an allowance of 3s. a day in lieu of rations, whenever other officers employed with the expedition are given free rations or an allowance in lieu of rations. While in receipt of these allowances medical officers will not be entitled to any repayment or allowance under (*d*) and (*e*) above.

(*g*) *Outfit Allowance.*—An allowance of £12 is paid to every medical officer before his departure on first appointment for the purchase of camp outfit (*see* under "Outfit").

(*h*) *Special Allowances.*—Allowances varying in amount up to 10s. a day are paid to medical officers detailed for certain special duties (*e.g.*, sanitary duties in large towns, the charge of laboratories for research, &c.).

Medical officers when acting as Assistant District Commissioners on the Gold Coast, in addition to performing their medical duties, receive duty pay at the rate of £80 a year, and when acting as District Commissioners in Ashanti at the rate of £140 a year.

LEAVE OF ABSENCE, PASSAGES, ETC.

4. Medical officers are in general subject to the Colonial Regulations in force for the time being, Chapter XVIII. of which contains the rules specially applicable to West Africa. A brief summary of these rules is given here for convenience.

5. The ordinary tour of residential service is one year, followed by leave with full pay during the voyages to and from England and for four or two months clear in England, according as the officer is returning for further service in West Africa or not. If an officer is detained beyond the year, additional leave is given with full pay for ten or five days in respect of each completed month beyond twelve, according as he is returning or not. If he is invalided before the end of the year, the leave with full pay is for the voyages and for ten or five days in respect of each completed month, according as he is returning or not. Leave granted on the understanding that an officer will return is known as "return leave," and any pay drawn in respect of such leave is liable to be refunded if he does not return.

6. Leave may be extended for a limited period with half or no pay on the ground of ill health, or without pay on other grounds.

7. Free passages are given to all officers who are granted leave as above. A free passage is also given on first appointment, subject to the officer signing an agreement under which he is liable to refund its cost if he relinquishes his appointment for any other reason than physical or mental infirmity, or is removed for misconduct, within three years from the date of his arrival in West Africa.

8. Half pay is given during the voyage out on first appointment.

9. Fuller information on these points will be found in the Colonial Regulations, which are published in the annual Colonial Office List (Messrs. Waterlow & Sons, Great Winchester-street, E.C., price 10s. 6d.), or may be consulted on application at the Colonial Office ; and a copy of Chapter XVIII. may also be obtained free on application to the Colonial Office.

GENERAL CONDITIONS OF ENGAGEMENT.

10. Every medical officer, unless exempted from this condition on account of previous Colonial service or for any other reason is engaged in the first instance on probation for one year from the date of his arrival in West Africa. If it is established to the

satisfaction of the Governor or High Commissioner that an officer is not qualified for efficient service in West Africa, the Governor or High Commissioner, subject to the confirmation of the Secretary of State, will have full power to cancel his appointment at any time within the year without giving him any further compensation than a passage back to England, which will be granted only at the discretion of the Governor or High Commissioner.

11. At the end of the year of probation the officer may, on the recommendation of the Governor or High Commissioner, subject to the approval of the Secretary of State, be confirmed in his appointment with effect from the date of his first embarkation from England for West Africa ; and unless it is expressly continued in this manner, the appointment will cease at the end of the year.

PRIVATE PRACTICE.

12. All medical officers, except the Principal Medical Officer, in each Colony or Protectorate, are allowed to take private practice, provided that it does not interfere with the faithful and efficient performance of their official duties, but it is within the power of the Governor or High Commissioner to withdraw or suspend the privilege in such places and for such periods as he may consider desirable.

OUTFIT.

13. *Instruments and drugs* and all medical appliances are supplied by the Government. Medical officers are not required to provide themselves with microscopes, which are supplied, when necessary, by the Government.

14. *Camp outfit* on the following scale must be taken out by every medical officer, and an allowance of £12 is given for its purchase :—

Camp table, 2½ feet by 2 feet.
Camp bed (straps, &c.).
Hurricane lamp (with spare chimneys and wicks).
Enamelled basin.
Camp chair.
Portable bath.
Berkefeld filter.
Stable bucket.
Mosquito curtains.

Tents are supplied by the Government, if required.

15. *Clothing, &c.*—The following are recommended :—

Thin gauze vests and drawers.

One or two pairs of thick Jaeger drawers.

Thin flannel shirts.

White shirts, turned-down collars for wear at head-quarters (not required in Northern and Southern Nigeria).

Merino socks.

One or two pairs of woollen socks.

Thick woollen cholera belts.

Thin flannel pyjamas (and two thick).

Flannel dressing-gown.

Medium great-coat.

Light tropical mackintosh. The seams should be sewn throughout, as those fastened only with composition fall to pieces after a few weeks.

Umbrella—either white linen with green lining, or ordinary black with white cover.

Shooting boots.

A pair of high india-rubber rain boots for crossing swamps, &c., is useful.

Brush, comb, shaving-brush, razor, glass, tooth brushes, powder, sponge, soap, candles, needles and thread, &c.

16. *Miscellaneous outfit :—*

Table-ware (not required in Southern Nigeria)—plates, dishes, glass, knives, forks and spoons, cruet, tea and coffee pot, cups and saucers, jugs, &c. Table cloths, napkins, dusters, glass cloths.

Corkscrew, turnscrew, tin-opener.

Kitchen ware (not required in Southern Nigeria)—kettles, cooking utensils, towelling.

Camp canteen.

Water-bottle.

Waterproof sheet.

Thick blankets.

Towels.

Sheets (if desired).

Pillow cases.

Good watches or jewellery should not be taken out. A small clock is useful.

Lounge chair (for voyage).

Shot gun, ammunition, hunting knife and belt, &c., if desired.

Tin boxes, to hold 65 lbs. or less, are better than wooden boxes or portmanteaux. Transport is effected by means of native carriers, whose average load is 50 lbs. each.

N.B.—A complete set of winter clothes and winter underclothing may be required on board ship if an officer's leave of absence takes him to England in the cold weather. Arrangements might preferably be made for these to meet the officer during the voyage, as they are apt to get destroyed if kept unused in West Africa.

17. The above lists are only intended as a guide to requirements. Many articles can be obtained in West Africa, though at a rather higher price than in England. As a general rule it is desirable for officers to take out as little as possible with them, but circumstances vary, and a newly appointed officer should always, if possible, consult someone who has recently been on the Coast. If he applies to the Colonial Office he will be placed in communication with some officer at home on leave of absence, who will be able to advise him what to do.

UNIFORM.

18. In Northern and Southern Nigeria there is a uniform prescribed for medical officers in common with other civil officers, particulars of which can be obtained from the Colonial Office. In the other Colonies medical officers at present wear no special uniform.

QUARTERS.

19. At all the recognised stations free single quarters, furnished in most cases, are provided for medical officers, or an allowance is paid in lieu of quarters. Information as to the nature of the quarters, the amount of furniture supplied, &c., may be obtained on application at the Colonial Office.

PENSIONS AND GRATUITIES.

20. The ordinary regulations relating to pensions and gratuities for West African service can be consulted at the Colonial Office, but for convenience a brief though necessarily incomplete account of them is given here.

21. On attaining the age of 50 years, or after 18 years' service (of which at least 12 must have been residential), an officer is qualified for a pension calculated at $\frac{1}{40}$ of the last annual salary for each year of service.

22. If invalided after a minimum of seven years' service, he is qualified for a pension calculated at the same rate.

23. If invalided before completing seven years' service, he is qualified for a gratuity not exceeding $\frac{3}{4}$ of a month's salary for each six months of service; provided that he has been confirmed in his appointment, and that he is specially recommended by the Governor or High Commissioner for such gratuity.

24. For the purpose of calculating the *amount* of these pensions and gratuities, leave of absence without salary is not counted, while leave with half salary is counted half.

25. In addition to the ordinary regulations, an officer of the West African Medical Staff enjoys the following special privilege. At the end of nine years (of which not less than six must have been residential) he will be permitted to retire with a gratuity of £1,000, or at the end of 12 years (of which not less than eight must have been residential) with a gratuity of £1,250. All claims to pension are, however, forfeited on the receipt of such a gratuity.

APPLICATIONS FOR APPOINTMENTS.

26. Applicants for appointment as Medical Officers in the West African Medical Staff (the higher grades will usually be filled by promotion from the lower) must be British subjects of European parentage, and between 25 and 35 years of age; they must possess a complete double qualification, and must be on the Medical Register.

27. Preference will be given to unmarried candidates. Married ones are not excluded; but it should be remembered that passages for wives and children are not provided by the Government, that houses for them are rarely available, and that, except in the case of an officer dying on active service, no provision is made by the Government for a widow or orphans.

28. Candidates should, in the first instance, apply in writing to the Assistant Private Secretary of State, Colonial Office, Downing-street, London, S.W., stating generally their qualifications and enclosing a certificate of birth. A form of application will then be forwarded to them to fill up and return together with testimonials.

29. Candidates whom it is proposed to select for appointment will have to be medically examined by one of the medical advisers of the Colonial Office (or, in the case of those residing in a Colony, by a medical officer appointed by the Colonial Government), and

no appointment will be made unless the candidate is declared to be physically fit for service in West Africa.

30. Candidates for medical appointments in West Africa are allowed to express a preference for any particular Colony or Protectorate, and their wishes in this respect will be borne in mind and met as far as possible, but they are liable to be posted in the first instance, or transferred afterwards if necessary, to any other West African Colony or Protectorate at the discretion of the Secretary of State.

31. Transfers from one Colony or Protectorate to another will, however, be made as seldom as possible, and will usually be restricted to the following cases :—

(i.) If an officer is appointed in the first instance as supernumerary to the establishment in one Colony, or Protectorate, pending the occurrence of a vacancy in another Colony or Protectorate.

(ii.) If an officer applies himself for transfer in the same grade.

(iii.) On promotion.

(iv.) Temporary transfers in cases of emergency.

INSTRUCTION IN TROPICAL MEDICINE.

32. Every candidate selected for appointment will, unless the Secretary of State decides otherwise, be required to undergo a course of instruction for two or three months either at the London School of Tropical Medicine, Royal Victoria and Albert Docks, E. (near Connaught-road Station), or at the Liverpool School of Tropical Medicine at University College, Liverpool. The cost of the tuition, fees, board, and residence during such instruction, amounting to a maximum of £48 8s. 10d., for three months, will be borne by the Government ; and a daily allowance of 5s. (but no pay) will be paid to each candidate during the course, and may be continued subsequently up to the date of embarkation. These payments will be made subject to the candidate's signing an agreement by which he will be bound to refund them (1) if he declines to accept an appointment in any of the Colonies or Protectorates for which he may be selected by the Secretary of State, (2) if he fails to obtain the certificate referred to in the next paragraph, or (3) if he relinquishes the West African Service for any other reason than mental or physical infirmity, or is removed for misconduct, within three years of the date of his arrival in West Africa.

33. Every candidate sent to either of the schools is required to obtain a certificate showing that he has satisfied the school authorities with regard to his regularity of attendance, progress, and proficiency, and for this purpose to undergo any examinations which they may consider necessary; and if he fails to obtain such a certificate, he may not only be called upon to refund the payments made to him or on his behalf (as provided in the previous paragraph), but his selection for the West African Medical Staff may also be cancelled.

34. Half pay begins from the date of embarkation.

35. If a medical officer has for any reason not taken a course of instruction prior to appointment, he is required to take it during his first leave of absence, and to obtain the certificate before he can be confirmed in his appointment. In this case the tuition fees, but not the fees for board and residence, will be paid by the Government, and no daily allowance will be given in addition to pay.

36. The seniority of Medical Officers is reckoned generally from the date of their embarkation in this country, but in the case of those who have taken a course of instruction before proceeding to West Africa, a period is added equal to the period during which they have actually been under instruction. This addition, however, is made only for purposes of promotion, and does not affect pensions, gratuities, or increments of salary. Seniority alone does not, moreover, give any claim to promotion.

LITERARY NOTE.

We are informed by Dr. S. W. Kelley, of Cleveland, Ohio, U.S.A., that the Saalfield Publishing Company are about to issue under the title of "The Doctor's Recreation Series," twelve octavo volumes of selected works, which—though not strictly-speaking medical books—cannot fail to interest medical men. The titles of the twelve volumes are "The Doctor's Leisure Hour," "The Doctor's Red Lamp," "In the Year 1800," "A Book about Doctors," "The Doctor's Window," "Passages from the Diary of a Late Physician," "The Inn of Rest," "Doctors of the Old School," "The Shrine of Esculapius," "The Doctor's Domicile," "A Cyclopædia of Medical History," and "The Doctor's Who's Who." It is intimated that the first five volumes of the series will be published in the course of this autumn.

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THIS unique beverage has the pleasant acidity of the Lime Fruit, and that proper measure of sweetness which make certain fruits so refreshing to the system. It is particularly recommended to those suffering from Gout or Rheumatism.

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THIS beverage is made from an extract of the Kola Nut that grows in South Africa, the use of which enables the natives to undergo the utmost fatigue without any other food for long periods. As a nerve tonic our preparation cannot be excelled, particularly when the system is reduced by over indulgence in alcohol.

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DUBLIN - BELFAST.

IRELAND.

SANITARY AND METEOROLOGICAL NOTES.

Compiled by Sir John Moore, B.A., M.D., Univ. Dubl.;
F.R.C.P.I.; F.R. Met. Soc.;
Diplomate in State Medicine and Ex-Sch. Trin. Coll. Dubl.

Vital Statistics.

For four weeks ending Saturday, October 10, 1903.

IRELAND.

Twenty-two Town Districts.

The average annual death-rate represented by the deaths—exclusive of deaths of persons admitted into public institutions from without the respective districts—registered in the week ending October 10, 1903, in the Dublin Registration Area and the twenty-one principal provincial Urban Districts of Ireland was 17.9 per 1,000 of their aggregate population, which for the purposes of these returns is estimated at 1,093,289. The deaths registered in each of the four weeks ended Saturday, October 10, and during the whole of that period, in the several districts, alphabetically arranged, corresponded to the following annual rates per 1,000 :—

Towns, &c.	Week ending				Average Rate for 4 weeks	Towns, &c.	Week ending				Average Rate for 4 weeks
	Sept. 19	Sept. 26	Oct. 3	Oct. 10			Sept. 19	Sept. 26	Oct. 3	Oct. 10	
22 Town Districts	18.3	18.2	17.4	17.9	18.0	Lisburn -	13.6	31.8	9.1	13.6	17.0
Armagh -	0.0	13.7	20.6	20.6	13.7	Londonderry	13.9	12.6	20.2	21.4	17.0
Ballymena	9.6	9.6	9.6	14.4	10.8	Lurgan -	8.9	8.9	22.1	17.7	14.4
Belfast -	17.7	15.3	16.4	18.2	16.9	Newry -	12.6	21.0	21.0	12.6	16.8
Clonmel -	10.3	35.9	5.1	5.1	14.1	Newtownards	11.4	17.2	5.7	11.4	11.4
Cork -	21.2	24.0	15.8	21.9	20.7	Portadown -	25.8	20.7	31.0	15.5	23.2
Drogheda -	16.3	20.4	20.4	16.3	18.4	Queenstown	26.4	13.2	19.8	19.8	19.8
Dublin - (Reg. Area)	19.5	21.7	18.3	19.7	19.8	Sligo -	4.8	14.4	19.2	28.8	16.8
Dundalk -	4.0	43.9	0.0	8.0	14.0	Tralee -	15.9	0.0	21.1	0.0	9.3
Galway -	42.7	15.5	27.2	11.7	24.3	Waterford -	13.6	3.9	19.5	9.7	11.7
Kilkenny -	34.3	0.0	9.8	14.7	14.7	Wexford -	9.3	9.3	14.0	14.0	11.7
Limerick -	26.0	16.4	23.2	10.9	19.1						

The deaths (excluding those of persons admitted into public institutions from without the respective districts) from certain epidemic diseases, registered in the 22 districts during the week ended Saturday, October 10, were equal to an annual rate of 1.6 per 1,000, the rates varying from 0.0 in sixteen of the districts to 8.9 in Lurgan—the 4 deaths from all causes registered in that district including one from scarlet fever and one from diarrhœa. The 125 deaths from all causes registered in Belfast include one from measles, 2 from scarlet fever, 2 from whooping-cough, one from diphtheria, 4 from enteric fever, and 8 from diarrhœal diseases.

DUBLIN REGISTRATION AREA.

The Dublin Registration Area now consists of the City of Dublin as extended by the Dublin Corporation Act, 1900, together with the Urban Districts of Rathmines, Pembroke, Blackrock, and Kingstown. The population of this area is 378,994, that of the City being 293,385, Rathmines 33,203, Pembroke 26,025, Blackrock 8,759, and Kingstown 17,622.

In the Dublin Registration Area the births registered during the week ended Saturday, October 10, amounted to 190—105 boys and 85 girls; and the deaths to 150—72 males and 78 females.

Deaths.

The deaths registered represent an annual rate of mortality of 20.7 in every 1,000 of the population. Omitting the deaths (numbering 7) of persons admitted into public institutions from localities outside the Area, the rate was 19.7 per 1,000. During the forty weeks ending with Saturday, October 10 the death-rate averaged 23.7, and was 2.3 below the mean rate for the corresponding portions of the ten years 1893–1902.

Enteric fever and whooping-cough each caused 2 deaths; scarlet fever, influenza, diphtheria, and cerebro-spinal fever, each caused one death. Four deaths from diarrhœal diseases were recorded.

Of 41 deaths from tuberculous disease 2 were attributed to tubercular phthisis, 25 to *phthisis*, 4 to tubercular peritonitis, one to tabes mesenterica, and 9 to other forms of the disease.

Four deaths were assigned to carcinoma, and 5 to *cancer (malignant disease)*.

Of 9 deaths from diseases of the nervous system, 5, all of children under one year old, were from *convulsions*.

There were 22 deaths from diseases of the heart and blood vessels.

The deaths from diseases of the respiratory system (17) are equal to an annual rate of 2.3 per 1,000 ; the annual average rate for the corresponding period of the past 10 years is 3.2 per 1,000. The total includes 8 deaths from bronchitis, 5 from bronchopneumonia, and 2 from *pneumonia.*

The death of an infant was caused by accidental overlying in bed.

In 5 instances the cause of death was " uncertified," there having been no medical attendant during the last illness. These cases include the deaths of 3 infants under one year old and the deaths of 2 persons aged 60 years and upwards.

Forty-eight of the persons whose deaths were registered during the week were under 5 years of age (32 being infants under one year, of whom 11 were under one month old), and 30 were aged 60 years and upwards, including 8 persons aged 70 and upwards, of whom 4 were octogenarians.

Seventy-one of the deaths registered during the week occurred in hospitals and other public institutions. Of this number 20 took place in the North Dublin Union Workhouse and 14 in the South Dublin Union Workhouse.

The Registrar-General points out that the names of causes of death printed above in italics should be avoided whenever possible in Medical Certificates of the Cause of Death.

STATE OF INFECTIOUS DISEASE IN THE DUBLIN REGISTRATION AREA AND IN BELFAST.

Returns of the number of cases of infectious diseases notified under the " Infectious Diseases (Notification) Act, 1889," as set forth in the following table, have been furnished by Sir Charles A. Cameron, C.B., M.D., Medical Superintendent Officer of Health for the City of Dublin ; Mr. Fawcett, Executive Sanitary Officer for Rathmines and Rathgar Urban District ; Mr. Manly, Executive Sanitary Officer for Pembroke Urban District ; Mr. Heron, Executive Sanitary Officer for Blackrock Urban District ; Dr. Byrne Power, Medical Superintendent Officer of Health for Kingstown Urban District ; and Dr. Whitaker, Medical Superintendent Officer of Health for the City of Belfast :—

TABLE SHOWING THE NUMBER OF CASES OF INFECTIOUS DISEASES notified in the Dublin Registration Area (viz.—the City of Dublin and the Urban Districts of Rathmines and Rathgar, Pembroke, Blackrock, and Kingstown), and in the City of Belfast, during the week ended October 10, 1903, and during each of the preceding three weeks.

CITIES AND URBAN DISTRICTS	Week ending	Small-pox	Measles	Rubella	Scarlet Fever	Typhus Fever	Relapsing Fever	Diphtheria	Membranous Croup	Continued Fever	Typhoid or Enteric Fever	Erysipelas	Puerperal Fever	Varicella	Other Notifiable Diseases	Total
City of Dublin	Sept. 19	–	–	–	8	–	–	5	–	2	17	21	–	–	–	53
	Sept. 26	–	–	–	15	1	–	7	–	–	14	7	2	–	1	47
	Oct. 3	–	3	1	8	4	–	1	2	1	27	19	2	–	–	68
	Oct. 10	–	1	–	6	2	–	4	–	–	23	18	1	–	–	55
Rathmines and Rathgar Urban District	Sept. 19	–	–	–	–	–	–	–	–	–	1	1	–	2	–	4
	Sept. 26	–	–	–	–	–	–	2	–	–	–	–	–	–	–	2
	Oct. 3	–	–	–	2	–	–	1	–	–	–	–	–	1	–	4
	Oct. 10	–	–	–	–	–	–	2	–	–	3	–	–	–	–	5
Pembroke Urban District	Sept. 19	–	–	–	2	–	–	–	–	–	1	–	–	1	–	4
	Sept. 26	–	–	–	1	–	–	–	–	1	2	1	–	2	1	11
	Oct. 3	–	–	–	8	–	–	–	–	–	1	1	–	–	–	10
	Oct. 10	–	–	–	2	–	–	1	–	–	–	1	–	2	–	6
Blackrock Urban District	Sept. 19	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	Sept. 26	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	Oct. 3	–	–	–	4	–	–	–	–	–	1	–	–	–	–	5
	Oct 10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Kingstown Urban District	Sept. 19	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	Sept. 26	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	Oct. 3	–	–	–	1	–	–	–	–	–	–	1	–	–	–	2
	Oct. 10	–	–	–	1	–	–	–	–	–	–	–	–	–	–	1
City of Belfast	Sept 19	–	–	–	21	–	–	5	1	13	30	10	–	–	–	80
	Sept. 26	–	–	–	22	–	–	3	–	16	18	9	1	–	–	69
	Oct. 3	–	–	–	19	–	–	2	1	12	15	12	–	–	–	61
	Oct. 10	–	–	–	24	–	–	2	–	11	25	15	–	–	–	77

CASES OF INFECTIOUS DISEASES UNDER TREATMENT IN DUBLIN HOSPITALS.

During the week ending Saturday, October 10, 1903, one case of small-pox remained under treatment in hospital.

Nine cases of scarlet fever were admitted to hospital, 10 cases were discharged, and 113 cases remained under treatment at the close of the week.

Three cases of typhus fever were admitted to hospital during the week, one case was discharged, and 10 cases remained under treatment at its close.

Four cases of diphtheria were admitted to hospital, 6 were discharged, and 11 remained under treatment at the close of the week.

Fifteen cases of enteric fever were admitted to hospital, 12 were discharged, there were 2 deaths, and 67 cases remained under treatment at the close of the week.

In addition to the above-named diseases, 5 cases of pneumonia were admitted to hospital, 8 patients were discharged, and 11 cases remained under treatment at the end of the week.

ENGLAND AND SCOTLAND.

The mortality in the week ended Saturday, October 10, in 76 large English towns, including London (in which the rate was 14.5), was equal to an average annual death-rate of 15.8 per 1,000 persons living. The average rate for 8 principal towns of Scotland was 16.0 per 1,000, the rate for Glasgow being 15.5, and for Edinburgh 16.5.

Meteorology.

Abstract of Observations made in the City of Dublin, Lat. 53° 20′ *N., Long.* 6° 15′ *W., for the Month of September*, 1903.

Mean Height of Barometer, - - -	29.946 inches.
Maximal Height of Barometer (14th, at 9 p.m.),	30.561 ,,
Minimal Height of Barometer (10th, at 5 30 p.m.),	28.881 ,,
Mean Dry-bulb Temperature, - - -	54.3°.
Mean Wet-bulb Temperature, - - -	52.3°.
Mean Dew-point Temperature, - - -	50.3°.
Mean Elastic Force (Tension) of Aqueous Vapour,	.368 inch.
Mean Humidity, - - - -	86.8 per cent.
Highest Temperature in Shade (on 1st), -	67.2°.
Lowest Temperature in Shade (on 15th), -	37.8°.
Lowest Temperature on Grass (Radiation) (on 15th and again on 16th), - - -	34.3°.
Mean Amount of Cloud, - - -	55.0 per cent.
Rainfall (on 17 days), - - - -	3.397 inches.
Greatest Daily Rainfall (on 10th). - -	.966 inch.
General Directions of Wind, - - -	S., S.S.E., S.E.

Remarks.

So far as wind and rain are concerned, September proved a fitting sequel to the summer months of 1903. The rainfall—3.397 inches—was 53 per cent. in excess of the average, and the wind reached gale-force on as many as 6 days. Also a remarkably cold spell for the time of year followed a disastrous storm on the 10th, and lasted until the 16th inclusive. Subsequently temperature recovered completely under the influence of southerly winds

and remained high to the end of the month, the mean temperature of which in consequence showed little or no variation from the normal. A redeeming feature in the month was the amount of bright sunshine, the duration of which was estimated at 166 hours, or 44 per cent. of the possible duration, equal to a daily mean of 5.5 hours, compared with a twenty years' mean of 143.4 hours recorded at the Ordnance Survey Office, Phœnix Park, or 38 per cent. of the possible duration. At night also the "harvest moon" was much in evidence, and very perfect lunar rainbows were seen on the 4th and 8th.

The most prevalent winds were S., S.S.E., and S.E.

In Dublin the arithmetical mean temperature (56.0°) was slightly above the average (55.9°); the mean dry-bulb readings at 9 a.m. and 9 p.m. were 54.3°. In the thirty-eight years ending with 1902, September was coldest in 1886 and 1892 (M. T. = 53.0°), and warmest in 1865 (M. T. = 61.4°) and 1898 (M. T. = 60.2°). In 1902 the M. T. was 56.1°.

The mean height of the barometer was 29.946 inches, or 0.036 inch above the corrected average value for September—namely, 29.910 inches. The mercury rose to 30.561 inches at 9 p.m. of the 14th, having fallen to 28.881 inches at 5 30 p.m. of the 10th. The observed range of atmospheric pressure was, therefore, 1.680 inches.

The mean temperature deduced from daily readings of the dry-bulb thermometer at 9 a.m. and 9 p.m. was 54.3°, or only 2.5° below the value for August, 1903. Using the formula, *Mean Temp.* = *Min.* + (*Max.* — *Min.* × .476), the mean temperature was 55.7°, or 0.1° above the average mean temperature for September, calculated in the same way, in the thirty years, 1871–1900, inclusive (55.6°). The arithmetical mean of the maximal and minimal readings was 56.0°, compared with a thirty years' average of 55.9°. On the 1st the thermometer in the screen rose to 67.2°—wind, S.W.; on the 15th the temperature fell to 37.8°—wind, E. The minimum on the grass was 34.3° on both the 15th and the 16th.

The rainfall was 3.397 inches, on 17 days. The average rainfall for September in the thirty-five years, 1866–1900, inclusive, was 2.220 inches, and the average number of rainy days was 15. In 1871 the rainfall was very large—4.048 inches on, however, only 13 days; in 1896 no less than 5.073 inches fell on 23 days, establishing a record rainfall for September. On the other hand,

in 1865, only .056 inch was measured on but 3 days. In 1902, 2.969 inches fell on 16 days.

High winds were noted on as many as 13 days, and attained the force of a gale on 6 occasions—the 5th, 8th, 10th, 18th, 21st, and 28th. The atmosphere was foggy only on the 15th. A solar halo was observed on the 27th. Lunar rainbows were seen on the nights of the 4th and 8th. Hail fell on the 11th, and thunder and lightning occurred on the night of the 26th.

The rainfall in Dublin during the nine months ending September 30th amounted to 25.269 inches on 174 days, compared with 21.425 inches on 149 days in the same period of 1902, 18.070 inches on 124 days in 1901, 24.394 inches on 156 days in 1900, 20.948 inches on 138 days in 1899, only 10.968 inches on 112 days in 1887, and a thirty-five years' average of 19.880 inches on 145 days.

At Knockdolian, Greystones, Co. Wicklow, the rainfall was 3.950 inches on 20 days, compared with 3.995 inches on 12 days in 1902, 5.420 inches on 19 days in 1901, and only .695 inch on but 4 days in 1900. The heaviest fall in 24 hours was .890 inch on the 10th. At Knockdolian the rainfall since January 1st, 1903, has been 27.050 inches on 154 days, compared with 27.156 inches on 123 days in 1902, 25.105 inches on 119 days in 1901, 30.021 inches on 140 days in 1900, 28.440 inches on 139 days in 1899, and 19.688 inches on 124 days in 1898.

The rainfall at Cloneevin, Killiney, amounted to 3.60 inches on 18 days, the maximal fall in 24 hours being .97 inch on the 10th. The average September rainfall at this station in the 18 years, 1885–1902, inclusive, was 2.061 inches on 13 days. Since January 1, 1903, 24.03 inches have fallen on 164 days.

Dr. Arthur S. Goff returns the rainfall at Lynton, Dundrum, Co. Dublin, at 4.33 inches on 21 days compared with 5.03 inches on 18 days in 1901, and 4.09 inches on 19 days in 1902. The greatest daily fall was .92 inch on the 10th. The mean temperature in the shade was 55.3°. The screened thermometers rose to 65° on the 1st, and fell to 39° on the 15th and also on the 16th. Hail fell on the 9th, and thunder occurred on the 26th.

In the City of Cork the rainfall was 4.07 inches on 18 days, or 1.37 inches above the average for September. The rainfall was greatest on the 4th, when 0.67 inch was measured. In the 9

months ended September 30, the rainfall was 40.64 inches, or 14.25 inches above the average.

At the Railway Hotel, Recess, Connemara, Co. Galway, 8.862 inches of rain fell on 19 days in September. This large amount included 2.920 inches on the 10th, 1.152 inches on the 8th, and .820 inch on the 7th.

Dr. J. Byrne Power, F.R. Met. Soc., Medical Superintendent Officer of Health, Kingstown, reports that the mean temperature at that health resort was 56.3°, being 1.7° below the average for September during the previous five years. The extremes were—highest, 67.5° on the 1st; lowest, 43° on the 14th. At Bournemouth the mean was 58.8°, the extremes being—highest, 74° on the 29th and 30th; lowest, 42° on the 12th and 15th. The mean daily range of temperature at Kingstown was 10.6°, and at Bournemouth, 13.5°. The mean temperature of the sea at Sandycove bathing-place was 55.3°, being 2.7° below the average, and the absolute lowest for September during the previous 5 years. The rainfall was 3.51 inches on 19 days at Kingstown, and 1.83 inches on 14 days at Bournemouth. The Mourne Mountains were visible from Kingstown on the 3rd. The total duration of bright sunshine was 159.5 hours at Kingstown, 165.8 hours at Phœnix Park, 127.7 at Valentia, 149.8 hours at Parsonstown, 153 hours at Southport, and 142.5 hours at Eastbourne.

TRIGEMIN, A NEW ANALGESIC.

This new remedy is a chemical derivative from pyramidon, produced by the action of butyl-chloral-hydrate on the latter. Clinical tests with this drug have lately been made by Overlach (*Berl. klin. Woch.*, Vol. 40, No. 35), which seem to demonstrate that it has a specific action on the painful affections of the cranial nerves. It does not produce any gastric irritation, and has no effect on the heart, as the two constituents neutralise each other. It can, therefore, be employed in organic heart disease. Favourable effects were observed in headaches from exertion, in those from influenza alcohol, migraine, &c. It is also of particular value in occipital neuralgia and facial neuralgia, both in extensive and localised types, and in toothache. The adult dose is from 0.5 to 1.2 grammes; a moderate dose once or twice daily is usually sufficient. The preparation is a German one, manufactured by Lucius & Brüning, Hoechst-am-Main.—*Medical News*, New York, Oct. 10, 1903.

PERISCOPE.

THE KING'S SANATORIUM.

Dr. Charles Reinhardt contributes a remarkable article to the October number of *The Health Resort* on "The King's Sanatorium, a Waste of Lives and Money," in which he criticises in very adverse terms the decision of the King's Advisory Committee regarding the disposal of the sum of £200,000 placed in His Majesty's hands nearly two years ago by Sir Ernest Cassel "for charitable or utilitarian purposes," and allocated by His Majesty's direction to the erection in England of a sanatorium for tuberculous patients. An announcement appeared in the *British Medical Journal* of September 19th, 1903, that the digging for the foundations of the sanatorium had been begun on the site at Easebourn, near Midhurst, in Sussex (a few miles south of Haslemere); that the building will cost between £50,000 and £60,000; and that it will probably be ready for the reception of patients within two years time. Dr. Reinhardt takes this as his text for a denunciation of the pavilion system as opposed to the châlet system of open-air treatment. He bases his objections to the former method on the greater capital expenditure, and on the delay involved in building, as well as on the alleged inferiority of results obtained to those obtained by treating patients in separate huts. He states that "the sum of £200,000 placed at the King's disposal by Sir Ernest Cassel might have been utilised for the erection of ten sanatoria on the châlet principle in as many different parts of the country, each to provide for 100 patients. The total cost, including purchase of the freehold of the necessary grounds and the equipment of furniture, would have been covered by £10,000 per sanatorium, which works out at the rate of £100 per bed. Therefore, only half the capital sum would have been absorbed, leaving £100,000 to be invested at interest to provide an annual income of £4,000, which presumably, by means of public subscription and small contributions from the patients or their friends, could have been augmented to such an extent as to provide for maintenance. The whole of these ten sanatoria might have been erected and equipped within six months of the receipt by the King of Sir Ernest Cassel's gift; therefore, they would have already been at least a year in full working order, during which time each bed might

have been occupied in turn by not less than three patients. Therefore, 3,000 persons might have been already treated, and provided that care was exercised in the selection of the cases, advanced and hopeless ones being refused as unsuitable, at least 80 per cent. of cures might have been effected. Thus, no less than 2,600 persons might already have been returned to their employment cured; and during the two years that must elapse before the Haslemere Palace will be ready a further 5,200 cases might be successfully treated, making a grand total of 7,800 persons who might have been saved from suffering and whose lives might have been usefully prolonged. That so much benefit should have been lost is bad enough; but worse remains, for even when the time comes for the reception of patients at the King's Sanatorium, the difference between the numbers to whom treatment will be afforded and those who might have benefited will still remain as one to ten, and the unfortunate example will doubtless be so far-reaching in its effects that one is staggered by the awful consequences which careful contemplation of the subject compels one to realise." Opinions will differ as to the value to be attached to conclusions drawn from these figures. They seem to us to have been put forward much too dogmatically, and we much regret that Dr. Reinhardt has expressed his convictions with so much vehemence.

NEW PREPARATIONS AND SCIENTIFIC INVENTIONS.

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In Memoriam.

SIR GEORGE FREDERICK DUFFEY, Knt.,

M.D. UNIV. DUBL.;

FELLOW AND PAST-PRESIDENT, R.C.P.I.;

CONSULTING PHYSICIAN TO THE ROYAL CITY OF DUBLIN HOSPITAL.

We have to record with profound regret the death, on Tuesday, October 13, 1903, at his residence, 30 Fitzwilliam-place, Dublin, of Sir George F. Duffey, M.D., Past President of the Royal College of Physicians of Ireland. For several months past the health of this gifted and most popular physician had been a source of the gravest anxiety to his family and many friends. Consultations between London and Dublin Consultants were held from time to time, and the consensus of medical opinion was that the malady from which he suffered was an aggravated and complicated form of locomotor ataxy. His illness, which was of a singularly distressing nature, borne with marvellous patience and fortitude, defied the best efforts of medical science and the devoted and unceasing care of his family. The end came peacefully and painlessly at the last.

George Frederick Duffey was born at 5 Upper Fitzwilliam-street, Dublin, on the 20th of June, 1843, so that at the time of his death he had only just entered upon his sixty-first year. His father, John Duffey, Esq., was a barrister-at-law. He graduated in the University of Dublin in Arts in 1863, and in Medicine and Surgery in 1864. He took the higher degree of Doctor of Medicine in the University in 1871. During his undergraduate career, as a student of medicine in the School of Physic in Ireland, he won the Medical Scholarship and the Senior Medical Exhibition. Shortly after obtaining his qualifications he became a member of what is now the Royal Army Medical Corps, obtaining first place at the Entrance Examination to Netley Army Medical School. He served as Assistant-Surgeon in the 1st Battalion of the 24th Regiment at home, and also on the Mediterranean station, until 1871, when he resigned his commission and settled in Dublin. A few years later he learned with sorrow the news of the annihilation of his old regiment on the fatal field of Isandhlwana in the Zulu War of 1879.

In 1876 Sir George Duffey was appointed physician to

Mercer's Hospital, and lecturer on Materia Medica in the Carmichael College of Medicine and Surgery. Six years later, in 1882, he resigned his position at Mercer's Hospital on being elected physician to the Royal City of Dublin Hospital. This post he continued to fill with consummate success, and after his enforced resignation had been accepted with the greatest regret, he was unanimously appointed consulting physician to his old hospital, an appointment which by a strange coincidence, was gazetted only on Monday, October 12, 1903—the very eve of his death. For many years he was also consulting physician to the Molyneux Asylum and National Institution for the Female Blind of Ireland, Leeson Park, Dublin.

During his active and busy life Sir George filled many appointments in addition to those already named. Thus. he acted as examiner in Materia Medica in the Queen's University before its dissolution, and also as extern examiner in the Institutes of Medicine in the University of Dublin. For several years he acted as Inspector of Examinations for the General Medical Council, as well as Visitor of the Examinations of the Pharmaceutical Society of Ireland on behalf of His Majesty's Privy Council.

No greater proof of his marvellous tact and *savoir faire* can be adduced than the fact that in all the years he held these important and delicate posts he never made an enemy or raised the faintest adverse criticism of his findings and suggestions.

When the Carmichael College of Medicine and the Ledwich School of Medicine were amalgamated with the School of Surgery of the Royal College of Surgeons in Ireland, Sir George Duffey became Professor of Materia Medica and Pharmacy in the combined Schools; and this appointment he held to the close of his busy life.

He was admitted a Licentiate in Medicine and Midwifery of the Royal College of Physicians of Ireland in 1871. On St. Luke's Day, 1873, he was elected Fellow of the College, and he was unanimously chosen President on St. Luke's Day, 1896. In the following year he received the well-deserved honour of Knighthood. His services to the College, which delighted to honour him, were unceasing and most valuable, though unobtrusive and unpretentious. By his brother-Fellows he was universally respected and beloved—his name stood amongst them for all that was honourable, faithful and true.

At the Annual Stated Meeting of the College held on the

Morrow of St. Luke's Day, October 19, 1903, the following resolution was proposed by Dr. J. Magee Finny, seconded by Sir John Moore, and adopted in silence, the President and Fellows standing :—

"Resolved—That at this the first meeting of the College since the death of Sir George Duffey, we, the President and Fellows, desire to place on record our deep regret at the loss the College has sustained by the removal of one of its Fellows and Past-Presidents who was ever loyal to the College and upheld the highest principles of our Profession. Regular in his attendance, painstaking and helpful at Committees, he has left a place it will be hard to fill ; while personally we feel we have lost a genial *confrère* and a generous friend.

"We desire that a copy of this resolution be forwarded to Lady Duffey, with the unanimous expression of our sincere sympathy with her and her family in their bereavement."

Sir George was a man of much literary ability, and contributed many valuable papers to the literature of medicine. In 1873 he originated and became the editor of the *Irish Hospital Gazette*, a first-class publication, which was afterwards merged in the *Dublin Journal of Medical Science*. In 1879 he edited and in great measure re-wrote "Handsel Griffith's Materia Medica and Pharmacy." In 1884 he published "Suggestions for a Plan of taking Notes of Medical Cases," a second edition being called for in 1890. Among his many contributions to medical literature may be mentioned a paper on "Cystic Degeneration of the Kidneys causing Dystocia" (*Med. Times and Gazette*, 1866), papers on "Rheumatic Orchitis as a Sequel to Fever" (1872), "Iodic Purpura" (1880), and "The Uses of Thiocamf" (1893)—all of which appeared in the pages of this Journal. In the *Transactions of the Royal Academy of Medicine in Ireland* also will be found valuable communications from his pen on "The Connection of Acute Diabetes with Diseases of the Pancreas" (1884), "A Milky Fluid from a Case of Ascites" (1886), "Hydatid Cyst of the Pleura" (1891), "Laryngeal Necrosis in Enteric Fever" (1898), "Stenosis of the Tricuspid, Aortic, and Mitral Orifices" (1901), &c.

Sir George's powers of organisation were marvellous. They were never more conspicuously shown than when—mainly through his energy and tact—the Dublin (or Leinster) Branch of the British Medical Association was founded in the year 1877. It was largely owing to his influence also that the Royal College of Physicians of Ireland lent its countenance to the movement, and extended the hospitality of its splendid Halls

in Kildare-street to the Dublin Branch. It will be remembered also that SIR GEORGE was Local Honorary Secretary to the great Dublin Meeting of the Association in 1887—when Sir John Banks, K.C.B., the *doyen* of the Medical Profession in Ireland, presided over one of the largest and most representative gatherings of the Profession that had ever taken place. Other offices in the Association held by SIR GEORGE DUFFEY in connection with its annual meetings were Secretary of the Section of Medicine at Cork in 1879, Vice-President of the same Section at Belfast in 1884, and again at Glasgow in 1888, and lastly, President of the Section of Medicine at Carlisle in 1896. In 1901 he was unanimously chosen President of the Dublin Branch, of which he may justly be described as the Founder.

In 1871 SIR GEORGE DUFFEY married Agnes, daughter of the late John Cameron, Esq., of Dublin, and sister of Sir Charles Cameron, Bart., M.D., D.L., for twenty-five years M.P. for Glasgow, of Balclutha, Greenock. His family consisted of two sons and three daughters, but a few years ago a great sorrow fell upon him in the unexpected death of his elder son, Lieutenant George Allan Duffey, who succumbed to yellow fever while serving with his regiment in the West Indies. His younger son, Arthur Cameron Duffey, M.D., is a lieutenant in the Royal Army Medical Corps, and acted as Special Commissioner to the United States on behalf of the Cancer Research Society in 1899. He also served in South Africa in the late war. His second daughter is married to John H. Trevor M'Neill, Esq., B.A., Univ. Dubl., of the Vice-Chancellor's Court.

This is not the place to enter at length into SIR GEORGE'S private character. Suffice it to say that in public and in private life alike he proved himself ever warm-hearted, generous, and sympathetic. He was a consistent and faithful friend, as many can testify from practical experience in times of need. By his death, Irish medicine loses a distinguished ornament, the members of the profession an able and sterling colleague, and Irishmen at large a true, noble-hearted, and patriotic fellow-countryman.

"Quis desiderio sit pudor, aut modus
"Tam cari capitis? . . .
"Multis ille quidem flebilis occidit:
"Nulli flebilior quam mihi."

J. W. M.

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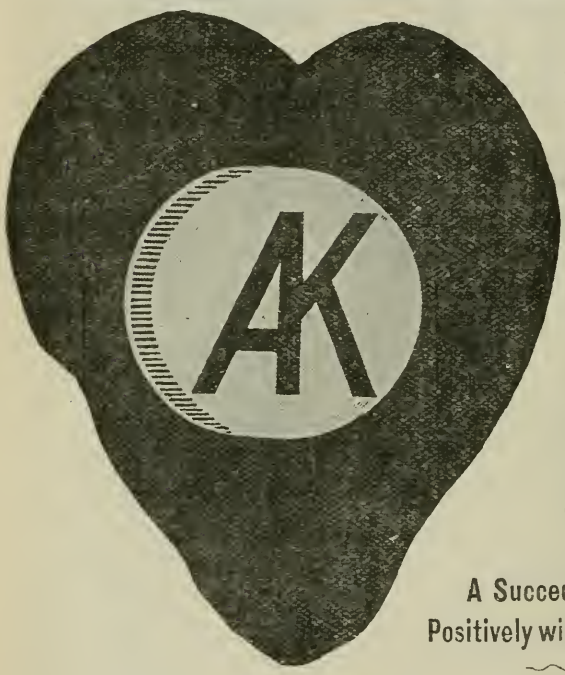

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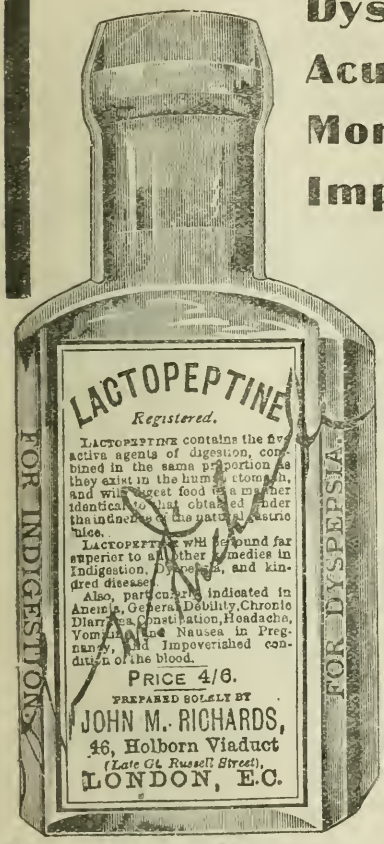

"A glance at the formula of LACTOPEPTINE would convince even the most sceptical of the valuable results that must ensue through its adminstration. Composed of *ptyalin*, *pepsin*, *pancreatine*, *hydrochloric*, and *lactic acids*, it is a combination of all the digestive agents, consequently can never be administered without giving the utmost satisfaction, for if there is a deficiency in the system of all or any of these agents, LACTOPEPTINE will supply it, and thus assist in digesting the food, enabling the organs that produce these principles of digestion to rest and recuperate their relaxed energies."

MARKETED in POWDER and TABLETS.

In 1-oz., 4-oz., and 8-oz. bottles: Prices for Dispensing purposes: **3 5, 10 9, 20 10** respectively, post free.

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For Indigestion and Dyspepsia

BENGER'S FOOD

For INFANTS, INVALIDS, and THE AGED.

This delicious, highly nutritive, and most easily digested Food is specially prepared for Infants, and for those whose digestive powers have been weakened by illness or age.

The following letter is published by special permission of the Russian Court.

"Balmoral Castle,
"Scotland, 25th Sept.

"Sirs,—Please forward to Balmoral Castle one dozen 2/6 Tins of **BENGER'S FOOD** for H.I.M. **THE EMPRESS OF RUSSIA**, addressed to Miss Coster. We have received the box ordered from Peterhoff.

"Yours truly, F. COSTER.

The Lancet describes it as "Mr. Benger's admirable preparation."

The London Medical Record says :—"It is retained when all other foods are rejected. It is invaluable."

The British Medical Journal says :—"Benger's food has by its excellence established a reputation of its own."

The Illustrated Medical News says :—"Infants do remarkably well on it. There is certainly a great future before it."

A Government Medical Officer writes :—"I began using your Food when my son was only a fortnight old, and now (five months) he is as fine a boy as you could wish to see."

From an eminent Surgeon :—"After a lengthened experience of Foods, both at home and in India, I consider Benger's Food incomparably superior to any I have ever prescribed."

A Lady writes:—"Really I consider that, humanly speaking, Benger's Food entirely saved baby's life. I had tried four other well-known Foods, but he could digest nothing until we began the 'Benger.' He is now rosy and fattening rapidly."

BENGER'S FOOD is sold in Tins by Chemists, &c., Everywhere

WHOLESALE OF ALL WHOLESALE HOUSES AND SHIPPERS.

"APENTA"

Natural Aperient Water.

"I have obtained favourable results with

'APENTA' WATER

in CHRONIC CONSTIPATION, OBESITY, and similar troubles, in which the use of a BITTER WATER is indicated."

Professor Dr. ROSENSTEIN,

Royal University of Leyden,

Consulting Physician to

H. M. The Queen of Holland.